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Forms of address, performative prefixes, and the syntax-pragmatics interface

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ABSTRACT

Forms of address must be pronominal in English but can be either pronominal or nominal in Vietnamese. I propose to analyze this fact as a parametric difference: the two languages choose different ways to implement one and the same general preference principle. This principle is Rule I, which favors binding over coreference. For English, Rule I compares bound and free expressions. For Vietnamese, Rule I compares bound and free pronouns. The analysis crucially relies on the hypothesis that speech acts are represented in the syntax.

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1. Introduction

The term 'pragmatics', in its most basic sense, refers to the study of linguistic facts whose description, and explanation, require reference to the language users. As an example, consider the contrast in (1).[1]

(1) a. It's raining but John doesn't believe it is.
b. #It's raining but I don't believe it is.

It is hard to see how syntax or phonology can explain the fact that (1a) is perfectly acceptable while (1b) sounds odd. No formation rule is violated in either sentence, and the contrast is obviously independent from how the sentences are pronounced: it would obtain even if one is spoken by a native speaker and the other by a foreigner. What about semantics? Perhaps there is something wrong with the meaning of (1b)? Well, suppose (1a) is uttered by Mary and (1b) is uttered by John. Then the first person pronoun *I* in (1b) would have the same denotation as the name *John* in (1a), which means these sentences would become semantically equivalent: they would be true in exactly the same set of possible worlds. However, the contrast in acceptability between (1a) and (1b) persists even in this context. In fact, (1b) is odd no matter who the speaker is.

But if there is nothing wrong with the phonology, the syntax, or the semantics of (1b), then what is wrong with it? Let us look at the sentence from a pragmatic perspective. Specifically, let us ask what kind of speaker would produce (1b)? One rule of our language game is the 'Maxim of Quality' which states that that we only say what we believe (Grice, 1967). It then follows that the speaker of (1b) believes that it's raining and believes that she doesn't believe that it's raining. Given that we are opinionated about our belief, this means the speaker of (1b) believes that she believes that it's raining and believes that she doesn't believe that it's raining, which means she believes both p and $\neg p$, which means she is incoherent (Schlenker, 2016). It is the inference that the speaker of (1b) is incoherent that gives rise to its oddness. Note that there is nothing incoherent about the speaker of (1a): she believes that it's raining and believes that John doesn't believe that it's raining. There is no principle of language use which requires we only say what John, or some other person, believes.

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[1] The oddness of sentences such as (1b) was pointed out by G. E. Moore (1942).

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Thus, we see that it is the Maxim of Quality which is crucial in our account of the contrast between (1a) and (1b). More generally, we see that there are linguistic intuitions whose explanation needs to refer to the language user. While there is broad agreement that pragmatics is part of linguistic theory, whether pragmatics 'interfaces' with the other components of grammar, or whether it is totally 'encapsulated' from them, seems to be less of a settled issue. Let me illustrate this problem with a concrete example. Consider the exchange in (2).

(2) A: It's raining.
B: Yes. It is.

A question that received a lot of attention in the 1970's is whether speech acts, i.e. the language users and the illocution they perform, are represented in the 'logical form' of the sentence (Levinson, 1983).[2] Suppose that pragmatics is encapsulated from syntax, i.e. that no information about language users or what they do with the sentence is syntactically represented, then A's sentence and B's sentence in (2) will have the same logical form, namely (3).

(3) it is raining

If pragmatics is not encapsulated from syntax, and information about language users and what they do with the sentence is syntactically represented, then A's sentence and B's sentence in (2) will have different logical forms, namely those in (4a) and (4b), respectively.

(4) a. A TELL B it is raining
b. B TELL A it is raining

The 'encapsulation' view implies that the study of syntax and the study of pragmatics can proceed more or less in isolation: there are syntactic phenomena which can be explained without reference to such notions as 'the speaker', and there are pragmatic phenomena which can be explained without reference to such notions as 'c-command'. The 'non-encapsulation' view implies the opposite, namely that there are phenomena whose explanation requires reference to both pragmatic notions such as 'the speaker' and syntactic notions such as 'c-command'.

This paper provides an argument for the non-encapsulation view. My hope is to convince the reader that syntax and pragmatics should not be studied in isolation. I will argue that there are phenomena at the interface between syntax and pragmatics whose explanation requires both consideration of the language users and of the constituency of the sentence.

In this section I introduce the central puzzle which the paper sets out to resolve and present the two main ingredients of my analysis. The puzzle concerns a difference between English and Vietnamese with respect to forms of address. The two main ingredients of the analysis are (i) a parameterization of the preference principle which favors binding over coreference and (ii) the Performative Hypothesis which states that speech acts are syntactically represented.

1.1. Reference to discourse participants

English, like other natural languages, has two modes of direct reference to people: by names and by pronouns. Suppose, for example, that John and Mary are having a conversation, and John asks Mary the question in (5).

(5) Will Bill help Sue?

As an answer, Mary can choose between (6a) and (6b). Both sentences, in this context, are able to express the same proposition, which is that Bill will help Sue. In (6a), the reference is made via names, and in (6b), it is made via pronouns. Let us, henceforth, call reference made via names 'nominal reference', and reference made via pronouns 'pronominal reference'.

(6) Context: Mary is the speaker and John is the hearer
a. Bill will help Sue. → nominal reference
b. He will help her. → pronominal reference

Now, suppose Mary wants to tell John that she, Mary, will help him, John, the choice between nominal and pronominal reference is no longer available. Mary would be forced to use (7b). It would be quite odd for her to refer to herself, as the speaker, and to John, as the hearer, by using names. Following standard practice, I will use # to indicate oddness.

(7) Context: Mary is the speaker and John is the hearer
a. #Mary will help John. → nominal reference
b. I will help you. → pronominal reference

Note that the pronouns in (7b) are different from the pronouns in (6b). Specifically, those in (7b) are in the first person (*I*) and the second person (*you*), while those in (6b) are in the third person (*he* and *her*).[3] I will assume that there is a separate mechanism in the grammar which forces pronouns relating to speaker and hearer to be in the first person and second person, respectively, and those relating to neither to be in the third person. The question this paper is concerned with is not why pronouns have to be in the first and second person when relating to speaker and hearer. It is why pronouns have to be used when reference is made to speaker and hearer.

The crucial observation, then, is that reference to non-discourse participants, i.e. those who are neither speaker nor hearer, can be nominal or pronominal, but reference to discourse participants, i.e. speaker or hearer, must be pronominal (Reinhart,

[2] I follow standard practice and use the term 'logical form' to denote the syntactic structure of the sentence which inputs semantic interpretation.
[3] In text object language expressions will be italicized.

1983). How are we to understand this fact? Can we appeal to the 'context' in our explanation? It is clear that the interpretation of *he* and *her* in (6) is context dependent. Knowledge of English alone would tell us that *he* refers to a male and *her* to a female individual, but would not tell us who these individuals are. We infer that they are Bill and Sue from the fact that John has just asked Mary whether Bill will help Sue, and from our assumption that Mary is answering John's question. Now, what about the pronouns *I* and *you* in (7)? What can we infer about them from our knowledge of English alone? Well, we know that *I* must refer to speaker and *you* must refer to hearer. Does that mean interpretation of *I* and *you* are context independent? No, because we still need the context to know who is speaking to whom, i.e. who is speaker and who is hearer. There is, admittedly, a difference. The information that Mary is answering John's question, which is needed to interpret *he* and *her* in (6), is based on a pragmatic principle, namely the Gricean Maxim of Relation, which says that language users answer the question under discussion (Grice, 1967). The information that Mary is speaking to John, however, is not based on any pragmatic principle, but obtained from direct observation. We see with our eyes who is speaking to whom. Perhaps we could capitalize on this difference and propose the following generalization.

(8) If pronouns are interpreted by direct observation, they must be used instead of the corresponding names.

From (8) we derive the contrast between (6) and (7): the use of first and second person pronouns is obligatory because these are interpreted by direct observation, while the use of third person pronouns are not obligatory, because these are not interpreted by direct observation.

Should we be happy with (8)? I think not. First, if we look beyond the scenarios in (6) and (7), we will see that it is not true that third person pronouns are never interpreted by direct observation. Suppose John asks Mary the question in (9), and Bill is standing nearby.

(9) Who will help Sue?

Intuitively, Mary can point at Bill and say either (10a) or (10b).

(10) Context: Mary is answering (9), pointing at Bill
  a. Bill will!
  b. He will!

In this context, the pronoun *he* is interpreted by direct observation. However, the option of using the name *Bill* is clearly still available. Even for speakers who may perceive a slight preference for (10b) over (10a), the contrast between these two sentences is in no way as dramatic as that between (7b) and (7a). Thus, we cannot say that interpretation of a pronoun by direct observation precludes the use of the corresponding name. Another problem that I see with (8) is that it is a very peculiar claim. It does not seem to be derivable from any deeper, more general principle. In addition, the phrase 'interpreted by direct observation' is intended to apply to first and second pronouns only, so the claim is basically just another way of saying that the use of first and second pronouns is obligatory, which is a restatement of the facts. The puzzle remains why it is obligatory.

This puzzle becomes even more intriguing when we look at other languages. Consider Vietnamese. As it turns out, there is no contrast in Vietnamese between (6) and (7), or more precisely, between their respective Vietnamese counterparts. Specifically, nominal reference is possible in Vietnamese for non-discourse participants as well as discourse participants. Thus, suppose Nam wants to tell My that he, Nam, will help her, My. Both (11a) and (11b) are available to Nam as linguistic options.

(11) Context: Nam is speaker and My is hearer
  a. Nam sẽ giúp My.
    Nam will help My
  b. Tôi sẽ giúp bạn.
    I will help you

Thus, Nam can refer to himself, the speaker, and to My, the hearer, by using the names *Nam* and *My*, or by using the first person pronoun *tôi* and the second person pronoun *bạn*. This difference between English and Vietnamese will be the main puzzle which this paper aims to resolve. Let us state it clearly in (12). I will use the term 'forms of address' for expressions that refer to discourse participants.

(12) Main puzzle
  In English, forms of address must be pronominal, while in Vietnamese, they can be either pronomimal or nominal.

My analysis has two crucial ingredients, which I will now present and briefly discuss.

1.2. Parameterization of Rule I

Looking yet beyond English and Vietnamese, we see that the same difference obtains between several other languages. In fact, there seems to be a typological divide between languages that allow nominal forms of address and languages that do not. The former include Japanese, Thai, Khmer, Burmese, and the latter include the European languages and, interestingly, Chinese (Lasnik, 1989; Sidnell and Shohet, 2013).[4] My proposal is to view (12) as resulting from a parametric difference, i.e. a difference in the way each language implements a general principle of grammar. This principle is Rule I, proposed in Grodzinsky

[4] Lasnik (1989) explicitly mentions Vietnamese, albeit very briefly.

and Reinhart (1993). What Rule I says is (13). I submit that English implements it as (13a) and Vietnamese implements it as (13b).

(13) Rule I
Under sameness of meaning, prefer binding to coreference!
a. Rule I-E (English)
Under sameness of meaning, prefer bound expressions to free expressions!
b. Rule I–V (Vietnamese)
Under sameness of meaning, prefer bound pronouns to free pronouns!

As we can see, English compares bound expressions with free expressions, while Vietnamese compares bound pronouns with free pronouns. We will discuss (13) in more details in Sections 3.1 and 3.2.

1.3. The Performative Hypothesis

As it turns out, (13) is only the first of two crucial ingredients in my analysis. The second one is the hypothesis in (14), which is actually an old idea that has gone by the name of the 'Performative Hypothesis' (Levinson, 1983).

(14) Performative Hypothesis (PH)
Speech acts are syntactically represented.

Let us unpack PH, beginning with the notion of a speech act. Intuitively, we want to distinguish between a sentence and what is done by the utterance of the sentence. Consider the discourse in (15).

(15) A: Will John talk to Mary?
Sentence: [whether [John will talk to Mary]]
Speech act: A asks B whether John will talk to Mary
B: No. He won't.
Sentence: [he_{John} will not talk to Mary]
Speech act: B tells A that John will not talk to Mary

As shown in (15), I take the relevant level of analysis to be the 'logical form' of sentences, not their 'phonological form'. The orthographical representation of the sentence is somewhat closer to the latter, but it is the former which is conveyed by the utterance and which inputs semantic interpretation (cf. Huang, 1982; May, 1985; Chomsky, 1995; Heim and Kratzer, 1998; Fox, 2003). Note that the logical form may contain elements which contribute to the meaning of the sentence but which are not pronounced. For example, there is a silent *whether* in the yes/no question in (15)-A, and a subscript, *John*, on the pronoun *he* in (15)-B. We will discuss subscripts on pronouns shortly. For now, just assume that the subscript *John* on the pronoun *he* determines the referent of this pronoun to be the person John.

What is done when these sentences are uttered? Assuming that the conversation is conducted in a normal setting, the event that transpires when (15)-A is uttered is one of A asking B whether John will help Mary, and the event that transpires when (15)-B is uttered is one of B telling A that John will help Mary. These 'speech acts', intuitively, are to be distinguished from the sentences which are being used to perform them (Austin, 1962; Searle, 1969). Now, what PH claims, basically, is that the speech acts are part of the literal meaning of the sentences themselves. Specifically, the proponents of PH would say that the correct analysis of (15) is something like (16).[5]

(16) A: Will John help Mary?
Sentence: [A asks B [whether John will help Mary]]
Speech act: A asks B whether John will help Mary
B: John will help Mary.
Sentence: [B tells A [that John will not talk to Mary]]
Speech act: B tells A that John will not talk to Mary

As we can see, the logical form of the sentence, according to PH, contains a silent 'speech act level' which represents (i) speaker, (ii) hearer, and (iii) the action being performed by the utterance. Borrowing a term from the 1970's, we will call this syntactically represented speech act level the 'performative prefix' of the sentence (Levinson, 1983). The rest of the sentence, i.e. that part excluding the performative prefix, I will call its 'propositional core'. We will discuss PH in more details in Section 3.3.

2. Previous works in the pragmatic literature on nominal reference to discourse participants

My search in the pragmatic and anthropological literature for works dealing more or less directly with the central empirical question of this paper, namely why some languages allow nominal reference to discourse participants while others do not, yields few results. Descriptions of elaborate pronominal systems in which pronouns can be derived from kinship terms

[5] The idea that (aspects of) speech acts are part of the syntactic structure has a long history. See Frege (1879); Stenius (1967); Ross (1970); Lakoff (1970); Gazdar (1979); Chomsky (1981, 1986); Krifka (2001); Miyagawa (2012); Krifka (2015); Sauerland and Yatsushiro (2017); Krifka (2019, forthcoming); Wiltschko (2021); Miyagawa (2022), among others. It should be noted that the first explicit statement of PH was made in Ross (1970). It should also be noted, importantly, that the version of the PH employed in this paper suffices for the purposes of the theory developed here, but I do not claim to provide a theory that captures the 'nature of speech acts'. I thank an anonymous reviewer to drawing my attention to these last two points.

can be found in several works such as Cooke (1968) for Thai, Burmese, and Vietnamese, Haas (1969) for Thai, Chandrasekhar (1970) for Malayalam, Errington (1988) for Javanese, Shohet (2010) for Vietnamese, to cite a few. However, the use of proper names to refer to speaker and hearer as a choice point in cross-linguistic variation seems not to have been problematized to any substantial degree of explicitness. For the sake of completeness, however, I will briefly review two works in which I have found direct mention of this phenomenon in Vietnamese.

The first is Luong (1990), which is a comprehensive study of person reference in Vietnamese. The author notes that in this language 'nicknames and personal names can even be used as paradigmatic alternatives to kinship and status terms […]' (Luong, 1990, 108). In other words, names can be used in place of pronouns derived from relational nouns such as *anh* 'older brother' or *thầy* 'teacher'. Luong goes on to say that this use of proper names is made 'to render more salient the informality of interactional contexts' (Luong, 1990, 108). Luong also claims that 'adult Vietnamese women use only personal names for self-reference considerably more often than do their male counterparts of the same age' (Luong, 1990, 108). As a native speaker of Vietnamese who grew up and live among other native speakers of Vietnamese, I find this claim plausible. Luong (1990) describes many interesting facts and offers intriguing speculations about their origins.[6] However, this work does not address the question which is the main concern of this paper: why is reference to discourse participants by names possible in Vietnamese but not in English? As far as I can see, there is nothing in what Luong says about proper names in Vietnamese that would prevent English from having the same linguistic option, with all of its concomitant pragmatic opportunities.

The other work is Sidnell and Shohet (2013). These authors note that most pronouns in Vietnamese are derived from kinship terms such as *anh* 'older brother', *chị* 'older sister', and *em* 'younger sibling' and retain part of the original meaning of these terms as presupposition.[7] Thus, *em* presupposes that its referent is younger than the other discourse participant, for example. Now, a fact about these presuppositions is that they express asymmetric relations. Consider the relation 'is younger than', for example: if A is younger than B, then B cannot be younger than A. The problem then arises as to how to address people who are in the same position in the relevant social and generational hierarchies. Sidnell and Shohet call this 'the problem of peers', and suggest that proper names provide a solution: 'In Vietnamese, use of names in self-reference and address allows the speaker to avoid formally characterizing the relationship between him- or herself and the recipient […]' (Sidnell and Shohet, 2013, 627). Names refer without describing. They can thus be 'neutral' in a way that pronouns such as *anh*, *chị*, or *em* cannot be. Sidnell and Shohet's claim thus squares with the intuition that underlies Luong's claim, namely that names are used among people who can be 'informal' with each other.

However, just like Luong, Sidnell and Shohet do not address the central question of this paper, namely why Vietnamese allows nominal reference to discourse participants while English does not. Note that Vietnamese does have pronouns that are not derived from kinship terms: *tao* (first person), *mày* (second person), and *nó* (third person). Sidnell and Shohet acknowledge this fact, and remark, quite accurately, that these pronouns are used only among 'social intimates'. And since familiarity breeds contempt, the use of these terms 'involves a withholding of the normal status-marking characteristic of Vietnamese address and self-reference in such a way as to generate implicatures of contempt […]' (Sidnell and Shohet, 2013, 623). We may ask why these 'pure' pronouns in Vietnamese, which also refer without describing, cannot be neutral as their English counterparts are. Applying the same functionalist reasoning, we could say that they are not neutral because the option of using proper names is available in the language. But then the question is why this option is not available in English. This question, as far as I can see, is not addressed by anything which is said in Sidnell and Shohet (2013).[8]

Let us now come back to the main line of argument, beginning with some theoretical groundwork.

3. Some theoretical groundwork

This section unpacks Rule I and provides a more elaborate structural description of performative prefixes. Both tasks are needed for the resolution of the main puzzle, which will be the content of Section 4.

3.1. Coreference and binding

A pronoun can be interpreted as being 'coreferential' with another expression. Here is an example.

(17) A: How is John?
B: He is fine.
(Intended reading: John is fine)

[6] For example, Luong conjectures that '[…] it is not farfetched to suggest that the more frequent use of personal names for self-reference among adult women pragmatically foregrounds not as much the power dimension but the solidarity and informality in the public domain […]' (Luong, 1990, 109).

[7] Sidnell and Shohet do not call these expressions 'pronouns', but take them to be nouns used to refer in the same manner as pronouns. I do not see how this terminological difference affects our discussion in any way. I call them 'pronouns' because they can be bound, as demonstrated in (39b) for the pronoun *bạn*, which is derived from the word for 'friend'.

[8] Note, also, that German does not really have a neutral second person pronoun: *du* is familiar and *Sie* is formal, but there is no form which expresses no particular value on this dimension. Nevertheless, German, just like English, does not allow the use of proper names to refer to the hearer. Thus, what we are dealing with seems, at its core, to be a grammatical phenomenon.

The pronoun *he* refers to the same person as the name *John*: it is coreferential with the name. I will henceforth represent coreference by co-indexation. The assumption we need to make, of course, is that names and pronouns are by default indexed (Chomsky, 1981; Heim and Kratzer, 1998). We can now represent (17) as (18).

(18) A: How is John_1?
B: He_1 is fine.

In addition to being coreferential, pronouns can also be bound. Consider (19), under the intended reading.

(19) No boy thinks he is sick.
(Intended reading: no boy thinks of himself as sick)

The pronoun *he* in (19) does not refer to anyone. Asking *who is he?* as a follow up to (19), under the intended reading, makes no sense. Now, we can agree that the interpretation of (19) is (20a), and also, that the determiner *no* is interpreted as in (20b): *no* says that the denotation of its domain, i.e. the NP complement, has nothing in common with the denotation of its scope, i.e. the VP.

(20) a. (19) $\Leftrightarrow$ [λx. x is a boy]$\cap$[λx. x thinks x is sick] $= \varnothing$
b. no A $B \Leftrightarrow A \cap B = \varnothing$

Thus, we want the VP constituent in (19) to mean (21).

(21) [λx. x thinks x is sick]

In other words, we want the VP *thinks* he_1 *is sick* to end up meaning 'thinks of oneself as sick'. For the purpose of this discussion, I adopt the view that grammar makes available the option of appending to any predicate expression P an indexed binder β_n whose syncategorematic semantics is given in (22) (Heim and Kratzer, 1998; Büring, 2005).[9]

(22) Interpretation of β_n
$[\beta_n\ P] = [\lambda x.\ P^{[n \to x]}(x)]$
where $P^{[n \to x]}$ is derived from P by replacing expressions bearing index n in P with x

Thus, appending β_n to VP results in the subject of VP, whatever it turns out to be, being identified with the expression bearing index n inside of VP. We can now assign (19) the logical form in (23). The meaning of its subconstituents are given in *E*–*S*, where the variable p ranges over propositions and x, y over individuals.

(23) [$_S$ no [$_A$ boy] [$_B$ β_1 [$_C$ [$_D$ thinks] [$_E$ $\text{he}_1$is sick]]]]
$[E] = \text{he}_1$ is sick
$[D] = [\lambda p.\ [\lambda y.\ y$ thinks $p]]$
$[C] = [\lambda y.\ y$ thinks he_1 is sick$]$
$[B] = [\lambda x.\ C^{[1 \to x]}(x)]$
$= [\lambda x.\ [\lambda y.\ y$ thinks he_1 is sick$]^{[1 \to x]}(x)]$
$= [\lambda x.\ [\lambda y.\ y$ thinks x is sick$](x)]$
$= [\lambda x.\ x$ thinks x is sick$]$
$[A] = [\lambda x.\ x$ is a boy$]$
$[S] \Leftrightarrow A \cap B = \varnothing$
$\Leftrightarrow$ [λx. x is a boy]$\cap$[λx. x thinks x is sick] $= \varnothing$

When a pronoun with subscript n is c-commanded by β_n, we say that the pronoun is 'bound'. Pronouns that are not bound are said to be 'free'. Thus, the pronoun in (18)-B is free, while the pronoun in (23) is bound. Given the mechanism of binding, some sentences now have two different analyses which result in the same reading. Consider (24).

(24) John thinks he is sick
Intended reading: John thinks of himself as sick
a. John_1 [thinks he_1 is sick]
b. John_1 [β_1 thinks he_1 is sick]

What (24b) says is that John has the property of being an x such that x thinks x is sick.[10]

[9] The attentive reader will notice that I am mixing object and metalanguage in (20)–(23). Being notationally kosher here would require using an assignment-relative interpretation function, and would, I think, make reading the text a bit more strenuous. I decided to opt for maximal legibility, hoping that the same attentive reader will also see that it would be no problem to make everything formally precise. Note, also, that (22) is the definition of β_n taken from Büring (2005). Heim and Kratzer (1998) has a slightly different definition, according to which the binder attaches to a proposition, not a predicate. I thank an anonymous reviewer for pointing out the need to make this clear.

[10] The binder (β_1) and the pronoun (he_1) in (24b) bear the same index as the subject ($John_1$). Note, however, that it does not matter which particular index the binder and the pronoun bear. As long as they bear the same index, binding is established. Given the rule in (22), (37) ends up saying the exact same thing as (24b), namely that John has the property of being an x such that x thinks x is sick.

(i) John_1 [β_5 thinks he_5 is sick]

The pronoun in (i) and the pronoun in (24b) are 'bound' in exactly the same sense: they are c-commanded by a co-indexed binder. Rule I–E would therefore rule in favor of (i) against (24a) in exactly the same way it rules in favor of (24b) against (24a). The reason I opt for (24b) instead of (i) is presentational: I try to avoid LFs with many different indices, which might make it hard for the reader to see which pronoun is 'related' to which name. But this is a choice of presentation, not a consequence of some grammatical principle. I thank an anonymous reviewer for pointing out the need to make this clear.

Thus, (24a) and (24b) mean the same, and sound the same. Are (24a) and (24b) equal in the eyes of grammar? Given Rule I–E, they are not. Rule I–E militates against free expressions in favor of bound expressions, which means it would actually rule out (24a), where the pronoun is free, in favor of (24b), where the pronoun is bound.[11]

3.2. Condition C

The term 'expressions', of course, includes both names and pronouns. This raises the following question: can names be bound? Does grammar allow a name to be c-commanded by a co-indexed binder? The answer, as it turns out, is no. Consider the contrast in (25).

(25) Intended reading: John thinks of himself as sick
  a. John thinks he is sick.
  b. #John thinks John is sick.

Suppose names can be bound, then nothing prevents (26a) and (26b) to be the parse of (25a) and (25b), respectively.

(26) a. John_1 [β_1 thinks he_1 is sick]
  b. John_1 [β_1 thinks John_1 is sick]

These logical forms are equally good in the eyes of Rule I–E: every expression in a position which can be bound is bound. And it is not clear what other rule (26b) violates. Thus, if names can be bound, we do not know what is responsible for the contrast in (25).

Now, suppose names cannot be bound. Specifically, suppose grammar contains the rule in (27). For partly historical reasons, I will call it 'Condition C' (cf. Chomsky, 1981).[12]

(27) Condition C
  Names cannot be bound.

Given (27), the parse in (26b) is excluded. The only parse left for (26b) is one where the name is free. But given Rule I–E, this parse would lose out to (26a). Thus, assuming both Rule I–E and Condition C results in (25a) having one parse which passes all the tests and (25b) having no parse which passes all the test. The contrast observed between (25a) and (25b), then, is evidence that we need both Rule I–E and Condition C, i.e. that names cannot be bound.[13]

Here is another argument for Condition C. Consider (28), which is ambiguous between the 'strict' reading in (28a) and the 'sloppy' reading in (28b).

(28) Only John thinks he is sick.
  a. Strict reading: John thinks of himself as sick and no other person thinks of John as sick
  b. Sloppy reading: John thinks of himself as sick and no other person thinks of themselves as sick

Assuming the semantics of *only* as in (29), the strict reading of (28) can be represented by the analysis in (30a) and the sloppy reading by that in (30b).

(29) only $A\ B \Leftrightarrow A$ has property B and no C, $C \neq A$, has property B
(30) a. only [$_A$ John_1] [$_B$ thinks he_1 is sick]
    $B = [\lambda y.\ y$ thinks he_1 is sick]
  b. only [$_A$ John_1] [$_B$ β_1 thinks he_1 is sick]
    $B = [\lambda x.\ x$ thinks x is sick]

Now, suppose names can be bound. We would predict (31) to have both (31a) and (31b) as possible parses, and thus, to be ambiguous between the strict and the sloppy reading in the same way as (29).

(31) Only John thinks John is sick
  a. Only [$_A$ John_1] [$_B$ thinks John_1 is sick]
  b. Only [$_A$ John_1] [$_B$ β_1 thinks John_1 is sick]

The fact, however, is that (31) is not ambiguous: it only has the strict reading, i.e. can only mean John thinks of himself as sick and no one else thinks of John as sick. This is evidence that (31b) is not a possible parse of (31), and this would follow from Condition C.

[11] One may ask why Rule I–E does not punish (18)-B because of the free subject pronoun he_1, or punish (24b) because of the free subject name $John_1$. The answer is that violation of Rule I is incurred only when an expression which could be bound is not bound. These subject expressions are in the highest position in the sentence and could thus not be bound. Therefore, the fact that they are not bound is not a violation of Rule I.

[12] The original formulation of Condition C, given in Chomsky (1981), is this: R-expressions must be free everywhere. As names are R-expressions, a consequence of this formulation is that names cannot be c-commanded by a co-indexed expression. What it is intended to do is the same as (27), namely to rule against (26b) in favor of (26a). I give (27) the name of 'Condition C' for this ('partly historical') reason.

[13] Note that (i), under the reading where *he* and *John* co-refer, is worse than (26b).

(i) #he_1 thinks John_1 is sick
  (Intended reading: John thinks of himself as sick)

Given what we have said, there should be no contrast between (25b) and (i). Both violate Rule I–E and Condition C. I will assume that there is another independent principle which militates against using pronouns before names when the opposite order is possible. This principle is violated by (i) but not by (25b), which explains the contrast between these two sentences.

We have been talking about English and Rule I–E. What about Vietnamese and Rule I–V? Recall the difference between Rule I–E and Rule I–V: the former favors bound over free expressions, while the latter favors bound over free pronouns. What differences between Vietnamese and English do we expect? Well, consider the observation that there is no contrast between (32a) and (32b), which are the Vietnamese counterparts of (25a) and (25b), respectively.[14]

(32) Intended reading: Nam thinks of himself as sick
  a. Nam nghĩ nó bị ốm
     Nam think he be sick
  b. Nam nghĩ Nam bị ốm
     Nam think Nam be sick

Do we predict this? The answer is yes. Consider the logical forms which yield the intended meaning of (32a) and (32b). For (32a), these are (33a) and (33b), and for (32b), they are (34a) and (34b).

(33) Parses of (32a) which yield the intended meaning
  a. Nam_1 nghĩ nó1 bị ốm
     → violates Rule I–V
  b. Nam_1 $[\beta_1$ nghĩ nó_1 bị ốm]
     → violates neither Rule I–V nor Condition C

(34) Parses of (32b) which yield the intended meaning
  a. Nam_1 nghĩ Nam_1 bị ốm
     → violates neither Rule I–V nor Condition C
  b. Nam_1 $[\beta_1$ nghĩ Nam_1 bị ốm]
     → violates Condition C

Here is the difference between English and Vietnamese: whereas the structure in (34a) would violate Rule I–E, it would not violate Rule I–V. Specifically, Rule I–E would militate against the free expression Nam1 in the embedded clause in favor of the bound expression nó1 in (33b), but Rule I–V would not, because Rule I–V only militates against free pronouns in favor of bound pronouns. In other words, names are not in the candidate set of Rule I–V. Thus, each of (32a) and (32b) has a parse which violates neither Rule I–V nor Condition C, resulting in both of these sentences being acceptable in Vietnamese.[15]

Note that for (32b) to be acceptable, it suffices for it to have one parse that is grammatical. However, we can ask whether both parses in (34) are grammatical in Vietnamese. In other words, we can ask whether Vietnamese also differs from English in that its grammar does not contain Condition C. Can names be bound in Vietnamese? The answer, as it turns out, is no. Consider (35).

(35) mỗi Nam nghĩ Nam bị ốm
     only Nam think Nam be sick
     'Nam thinks of himself as sick and no one else thinks of Nam as sick'

The fact is that (35) has only the strict reading, as indicated. Now, suppose Condition C does not apply in Vietnamese, we would expect the following parse to be possible for (35).

(36) mỗi $[_A\ \text{Nam}_1]$ $[_B\ \beta_1$ nghĩ Nam_1 bị ốm]
     Reading: 'Nam thinks of himself as sick and no one else thinks of themselves as sick'

This parse, however, would yield the sloppy reading, as indicated. Thus, the fact that (35) cannot have the sloppy reading is evidence that (36) is unavailable, i.e. that names cannot be bound, i.e. that Condition C does apply in Vietnamese.

The reader might have noticed that we have discussed binding only in relation to third person pronouns. Can first and second person pronouns be bound? Well, applying the same diagnostics, we have evidence that they can be. Specifically, both (37a) and (37b) can have the sloppy reading, indicating that both (38a) and (38b) are possible structures in English.

(37) a. Only I think I am sick
        Sloppy reading available: 'I think of myself as sick and no one else thinks of themselves as sick'
     b. Only you think you are sick
        Sloppy reading available: 'You think of yourself as sick and no one else thinks of themselves as sick'
(38) a. Only $[_A\ \text{I}_1]$ $[_B\ \beta_1$ think I_1 am sick]
     b. Only $[_A\ \text{you}_2]$ $[_B\ \beta_2$ think you_2 are sick]

The same hold for first and second pronouns in Vietnamese: both (39a) and (39b) allow the sloppy reading, indicating that both (40a) and (40b) are possible structures in Vietnamese.

(39) a. mỗi tôi nghĩ tôi bị ốm
        only I think I be sick
        Sloppy reading available: 'I think of myself as sick and no one else thinks of themselves as sick'
     b. mỗi bạn_2 nghĩ bạn_2 bị ốm
        Only you think you are sick
        Sloppy reading available: 'You think of yourself as sick and no one else thinks of themselves as sick'

[14] Note that Vietnamese verbs do not inflect. I will therefore use only infinitives in the English gloss.

[15] Note that (i), under the reading where *nó* and *Nam* corefer, (i) is worse than (32b), even though neither violates Rule I–V or Condition C

(i) #nó_1 nghĩ Nam_1 bị ốm
    he_1 think Nam_1 be sick

As the reader may recall, the same situation obtains in English with respect to (25b) and sentence (i) in footnote 13. I assume that the same principle which applies in English also applies in Vietnamese, namely one which militates against using a pronoun before a name when the opposite order is possible.

(40) a. mỗi [$_A$ tôi$_1$] [$_B$ β_1 nghĩ tôi$_1$ bị ốm]
b. mỗi [$_A$ bạn$_2$ [$_B$ β_2 nghĩ bạn$_2$ bị ốm]

3.3. The ditransitive structure of performative prefixes

Recall the Performative Hypothesis (PH): speech acts are represented in the grammar. More concretely, PH claims that the syntactic structure of (41a), spoken by speaker John and directed to hearer Mary, is something like (41b), where the underlined part, i.e. the 'performative prefix', is silent.

(41) a. It's raining (spoken by John to Mary)
b. John$_1$ TELL Mary$_2$ it's raining

The illocutionaray verb TELL describes the speech act event whose participants are John and Mary. It is a ditransitive verb which has a subject, *John*, an indirect object, *Mary*, and a direct object, the embedded sentence *it's raining*. I propose to analyze it in the same way other ditransitives are analyzed. Specifically, I hypothesize that TELL is split into two heads, a 'causative' verb CAUSE, and a 'perception' verb HEAR. Thus, TELL means 'cause to hear' (Barss and Lasnik, 1986; Larson, 1988; Pesetsky, 1995). The full analysis of (41b) is then (42), where the silent performative prefix is underlined.

(42) [$_A$ John$_1$ [$_B$ CAUSE [$_C$ Mary$_2$ [$_D$ HEAR [$_E$ it's raining]]]]]

I will remain agnostic as to whether the abstract verb HEAR should be considered synonymous with the lexical verb *hear*. Obviously, John may 'tell' Mary that it's raining by sending her a text message. If we take HEAR to be synonymous with *hear*, we would have to say that this situation involves a metaphorical use of language, where reading is hearing in some derivative sense. Alternatively, we can say that the semantics of HEAR is more inclusive than that of *hear*, and reading a text message falls under the basic, not derivative, meaning of HEAR. The choice is not consequential for the purpose of this paper, which is to explain the puzzle in (12). I will leave a precise semantic analysis of TELL to future research.

What I would like to point out, at this juncture, is that the performative prefix in (43) contains the left boundary of two predicate expressions, namely B and D, reproduced below.

(43) a. [$_B$ CAUSE [$_C$ Mary [$_D$ HEAR [$_E$ it's raining]]]]
b. [$_D$ HEAR [$_E$ it's raining]]

This means that we can, in principle, insert the binder β_n into the performative prefix at two places: below the subject (speaker) and below the indirect object (hearer). In other words, all four structures in (44) should be available in the grammar, where S is the speaker, H is the hearer, and φ is the propositional core of the sentence.

(44) a. [S$_1$ [CAUSE [H$_2$ [HEAR φ]]]]
b. [S$_1$ [β_1 [CAUSE [H$_2$ [HEAR φ]]]]]
c. [S$_1$ [CAUSE [H$_2$ [β_2 [HEAR φ]]]]]
d. [S$_1$ [β_1 [CAUSE [H$_2$ [β_2 [HEAR φ]]]]]]

We are now ready to resolve the puzzle in (12).

4. Analysis

This section shows how the machinery introduced in Section 3 works. In Section 4.1, I present my analysis of the main puzzle presented in Section 1. The analysis helps explain additional facts beyond the main puzzle, which are discussed in Sections 4.2 and 4.3.

4.1. Resolution of the main puzzle

The puzzle that this paper sets out to explain is presented in (12), reproduced in (45).

(45) Main puzzle
In English, forms of address must be pronominal, while in Vietnamese, they can be either pronomimal or nominal

Let us first discuss English. Suppose John is speaking to Mary. Thus, John is speaker and Mary is hearer. John is telling Mary that he will help her, using a sentence of the form in (49), where α and β are referential expressions.

(46) α will help β

The following logical forms would convey what John wants to convey.

(47) a. [John$_1$ [CAUSE [Mary$_2$ [HEAR [John$_1$ will help Mary$_2$]]]]]
→ violates Rule I–E
b. [John$_1$ [β_1 [CAUSE [Mary$_2$ [β_2 [HEAR [John$_1$ w. help Mary$_2$]]]]]]]
→ violates Condition C
c. [John$_1$ [CAUSE [Mary$_2$ [HEAR [I$_1$ will help you$_2$]]]]]
→ violates Rule I–E
d. [John$_1$[β_1 [CAUSE [Mary$_2$ [β_2 [HEAR [I$_1$ will help you$_2$]]]]]]]
→ violates neither Rule I–E nor Condition C

Looking at the structures in (47), we see that (47a) and (47c) violate Rule I–E, because they contain free expressions which could be replaced by bound expressions without changing the meaning of the sentence. In other words, Rule I–E excludes (47a) and (47c) because (47d) exists as a better choice. Now, (47b) does not violate Rule I–E, since it does not contain any free expression that could be replaced by a bound one. However, (47b) violates Condition C: there is a name which is c-commanded by a coindexed β_n. Thus, only (47d) passes all the tests. We thus predict, correctly, the contrast in (48) for English.

(48) Context: John_1 is speaker and Mary_2 is hearer
  a. #John_1 will help Mary_2 → pronunciation of (47a) and (47b)
  b. I_1 will help you_2 → pronunciation of (47d)

The sentence in (48a) is perceived as deviant because every possible parse of it is deviant. In contrast, (48b) is acceptable because one parse of it is grammatical.

Let us now turn to Vietnamese. Recall that the contrast between (48a) and (48b) does not obtain between the Vietnamese counterparts of these utterances.

(49) Context: Nam_1 is speaker and My_2 is hearer
  a. Nam_1 sẽ giúp My_2
    Nam will help My
  b. Tôi_1 sẽ giúp bạn_2
    I will help you

Parallel to English, the logical forms which convey what Nam wants to convey are given in (50). Being expressions of Vietnamese, however, they will be evaluated by Rule I–V, not Rule I–E. Condition C applies in the same way in both languages.

(50) a. [Nam_1 [CAUSE [My_2 [HEAR [Nam_1 sẽ giúp My_2]]]]]
    → violates neither Rule I–V nor Condition C
  b. [Nam_1 [β_1 [CAUSE [My_2 [β_2 [HEAR [Nam_1 sẽ giúp My_2]]]]]]]
    → violates Condition C
  c. [Nam_1 [CAUSE [My_2 [HEAR [tôi_1 sẽ giúp bạn_2]]]]]
    → violates Rule I–V
  d. [Nam_1 [β_1 [CAUSE [My_2 [β_2 [HEAR [tôi_1 sẽ giúp bạn_2]]]]]]]
    → violates neither Rule I–V nor Condition C

Comparing (47) and (50), we see where Vietnamese differs from English. Specifically, Vietnamese allows (50a). Given Rule I–V, names do not compete with bound pronouns in Vietnamese. Thus, Rule I–V favors (50d) over (50c), but does not favor (50d) over (50a). As for (50b), Condition C rules it out, just as it rules out (47b) for English. As a result, Vietnamese ends up with two possibilities: using free names, (50a), or using bound pronouns, (50b). We predict, correctly, that there is no grammaticality contrast between (49a), whose logical form is (50a), and (49b), whose logical form is (50d).

This concludes my derivation of (12), the main puzzle. It turns out that the analysis I just give for (12) predicts facts beyond (12). I discuss them next.

4.2. Switching betweeen different modes of reference

Vietnamese allows a limited form of switching between nominal and pronominal reference in the same sentence. Consider (51a) and (51b), both of which are acceptable.

(51) Context: Nam_1 is the speaker and My_2 is the hearer
  a. Tôi_1 sẽ giúp My_2
    I_1 will help My_2
  b. Nam_1 sẽ giúp bạn_2
    Nam_1 will help you_2

The intended meaning of these sentences, in the relevant context, is 'I will help you'. In (51a), reference to speaker is pronominal while reference to hearer is nominal. In (51b), reference to speaker is nominal while reference to hearer is pronominal. Both sentences are perfectly fine. Do we predict this? It turns out we do. Recall the possibilities listed in (44), reproduced below in (52).

(52) a. [S_1 [CAUSE [H_2 [HEAR φ]]]]
  b. [S_1 [β_1 [CAUSE [H_2 [HEAR φ]]]]]
  c. [S_1 [CAUSE [H_2 [β_2 [HEAR φ]]]]]
  d. [S_1 [β_1 [CAUSE [H_2 [β_2 [HEAR φ]]]]]]

In Section 4.1, we discuss cases which instantiate (52), where β_n is inserted under both speaker and hearer, and cases which instantiate (52a), where it is inserted under neither. However, nothing rules out (52b), where β_n is inserted under speaker but not under hearer, and (52d), where β_n is inserted under hearer but not under speaker. The first scenario, (52b), is exemplified by (51a), and the second, (52c), is exemplified by (51b). The logical forms of these sentences are given in (53).

(53) a. Logical form of (51a)
    [Nam_1 [β_1 [CAUSE [My_2 [HEAR [tôi_1 sẽ giúp My_2]]]]]]
    → violates neither Condition C nor Rule I–V
  b. Logical form of (51b)
    [Nam_1 [CAUSE [My_2 [β_2 [HEAR [Nam_1 sẽ giúp bạn_2]]]]]]
    → violates neither Condition C nor Rule I–V

However, switching between different modes of reference (nominal vs. pronominal) within the same sentence is not without constraints. Consider the sentences in (54). The context is the same one where Nam is speaker and My is hearer.

(54) Context: Nam_1 is speaker and My_2 is hearer
  a. #Nam_1 biết tôi$_1$ bị ốm
     Nam know I be sick
  b. #Tôi$_1$ biết Nam_1 bị ốm
     I know Nam be sick
  c. #My_2 biết Bạn$_2$ bị ốm
     My know you be sick
  d. #bạn$_2$ biết My_2 bị ốm
     You know My be sick

The intended meaning of (54a) and (54b), in this context, is 'I know I am sick', and that of (54c) and (54d) is 'you know you are sick'. Now, every sentence in (54) are unacceptable. In these sentences, we also see switching between different modes of reference. What makes (54) different from (51) is that the different modes of reference apply not to different discourse referents, as in (51), but to the same one. In (54a) and (54b), the speaker is referred to both nominally and pronominally, and the same holds for the hearer in (54c) and (54d). The generalization, then, is that (i) reference to different discourse participants (speaker vs. hearer) may be in different modes (nominal vs. pronominal), but (ii) reference to the same discourse participant must be in the same mode. We have explained (i). Can we explain (ii)?

The answer is yes. Consider (54a) and (54b) first, where the speaker is referred to both nominally and pronominally. Two possibilities obtain: either β_n is inserted under the speaker in the performative prefix, or it is not.

(55) a. [S_1 [β_1 [CAUSE …[… name_1 …pronoun_1 …]]]]
     → violates Condition C because the name is bound
  b. [S_1 [CAUSE …[… name_1 …pronoun_1 …]]]
     → violates Rule I because the pronoun is free

If β_n is inserted, all expressions co-indexed with the speaker will have to be pronouns, lest Condition C is violated due to the presence of bound names. If β_n is not inserted, every expression co-indexed with the speaker will have to be names, lest Rule I is violated due to the presence of free pronouns. It follows, then, that when the speaker is referred to both nominally and pronominally, either Condition C or Rule I will be violated, which means reference to the speaker cannot be both nominally and pronominally. Obviously, the same holds for the hearer. We thus derive the fact that reference to one and the same discourse participant must be modally consistent: either nominally throughout, or pronominally throughout.

4.3. Vocatives

I have presented the observation that forms of address in English must be pronominal as a general fact about this language. It is now time to qualify this claim: there is at least one context where English does allow nominal reference to discourse participants. Specifically, reference to hearer can be either nominal or pronominal in vocatives, as exemplified in (56a) and (56b), respectively.[16]

(56) Context: John_1 is speaker and Mary_2 is hearer
  a. Mary_2! Your_2 book is here.
  b. You_2! Your_2 book is here.

Reference to speaker in vocatives is deviant either way.[17]

(57) Context: John_1 is speaker and Mary_2 is hearer
  a. #John_1! My_1 book is here.
  b. #Me_1! My_1 book is here.

Obviously, John cannot use any of the sentences in (57) to convey to Mary the message that he is calling attention to himself of the fact that his book is here.[18] I will assume that an independent principle of language rules out first person vocatives.

(58) Constraint on vocatives
  Vocatives must refer to the hearer

[16] Pronominal vocatives seem to be more marked than nominal ones. Thus, while (56a) is relatively neutral, (56b) sounds disrespectful towards the hearer. I have nothing to say about this contrast in this paper. The question of interest here is why (56a) is grammatical at all.

[17] Note the accusative *Me!* in (57b). I assume that accusative is the default case in English and, therefore, that the deviance of (57b) is not due to a violation of Case Theory.

[18] I do not consider cases of 'self-talk', where John could in fact use the vocative *John!* to refer to himself, while looking in the mirror, say. In these scenarios, John becomes, linguistically, the hearer, and expressions which John would use to refer to himself in the non-vocative part of the sentence will have to be the second person pronoun (i.e. *you*, *your*, *yours*). It would be odd for John to look in the mirror and say *John! My book is here*., where *John* and *my* are intended to corefer. However, the sentence *John! Your book is here*., with *John* and *your* intended to corefer, is acceptable as an utterance of John to himself, looking in the mirror. This means cases of self-talk would be subsumed under my analysis of (56). For discussion on self-talk see Holmberg (2010); Geurts (2018); Wiltschko (2022); Krifka (2023).

Since (58) explains the oddness of (57), we are left with the question concerning (56): why is nominal reference to discourse participants possible in English vocatives? It turns out that a simple auxiliary hypothesis suffices to answer this question.

(59) Hypothesis on vocatives
Vocatives can, but does not have to, be embedded under a performative prefix.

Given (59), both (60a) and (60b) are possible structures.

(60) a. [vocative [performative prefix [propositional core]]]
b. [performative prefix [vocative [propositional core]]]

Let us now go back to the sentences in (56) and consider them in light of (59). Do both of them have grammatical parses? The answer is yes: (56a) can now be analyzed as (61a) and (56b) as (61b). Again, the performative prefix is underlined. The vocative is indicated by the exclamation mark.

(61) a. Logical form of (56a)
Mary_2! $\underline{\text{John}_1\ \text{CAUSE}\ \text{Mary}_2\ \beta_2\ \text{HEAR}}$ your_2 book is here
→ violates neither Rule I–E nor Condition C
b. Logical form of (52b)
$\underline{\text{John}_1\ \text{CAUSE}\ \text{Mary}_2\ \beta_2\ \text{HEAR}}$ you_2! your_2 book is here
→ violates neither Rule I–E nor Condition C

The reader is invited to verify for herself that both (61a) and (61b) satisfy Rule I–E as well as Condition C.

Let us now turn to vocatives in Vietnamese. First, it can be observed that the Vietnamese counterparts of (56a) and (56b) are acceptable as well. Vocatives in Vietnamese are morphologically distinguished by the particle ơi, which I gloss as VOC.

(62) Context: Nam_1 is speaker and My_2 is hearer
a. My_2 ơi! Sách của bạn_2 đây.
My_2 VOC book of you_2 here.
'My_2! Your_2 book is here.'
b. bạn_2 ơi! Sách của bạn_2 đây.
you_2 VOC book of you_2 here
'You_2! Your_2 book is here.'

Our analysis of (56) should apply to (62) also. The logical forms of (62a) and (62b) would be (63a) and (63b), respectively.[19]

(63) a. Logical form of (62a)
My_2! $\underline{\text{Nam}_1\ \text{CAUSE}\ \text{My}_2\ \beta_2\ \text{HEAR}}$ sách của bạn_2 đây
→ violates neither Rule I–V nor Condition C
b. Logical form of (62b)
$\underline{\text{Nam}_1\ \text{CAUSE}\ \text{My}_2\ \beta_2}$ HEAR bạn_2 ơi! sách của bạn_2 đây
→ violates neither Rule I–V nor Condition C

5. Conclusion

Let us recap. The empirical focus of this paper is on a striking difference between English and Vietnamese. In English, forms of address must be pronominal. Speakers must refer to themselves and to their hearers using the first and the second pronoun, respectively. The use of names in these contexts is perceived as severely degraded. This does not hold for Vietnamese. In this language, forms of address may be either pronominal or nominal. Thus, speakers may use pronouns or names to refer to themselves and their hearers. I explain this difference as parametric: English and Vietnamese differs with respect to a choice point in the implementation of Rule I, a general principle which favors binding configurations over semantically equivalent configurations without binding. Specifically, English applies this preference principle to all expressions, while Vietnamese applies it only to pronouns. My analysis crucially relies on the Performative Hypothesis, which states that speech acts are represented in the grammar. The analysis turns out to account for additional phenomena. For example, it provides a way to make sense of the fact that even in English, reference to the hearer is possible in vocatives. It also explains a curious restriction in Vietnamese: reference to different discourse participants may be in different modes, but reference to the same discourse participant must be in the same mode.

[19] Note that (i) is deviant, under the reading where *bạn* and *My* corefer.

(i) bạn ơi! Sách của My_2 đây.
you_2 VOC book of My_2 here
Intended reading: 'My_2! Your_2 book is here.'

There is a parse for (i) which violates neither Rule I–V nor Condition C, given in (ii). Note that we assume the speaker is Nam.

(ii) You_2! $\underline{\text{Nam}_1\ \text{CAUSE}\ \text{My}_2\ \text{HEAR}}$ sách của My_2 đây
→ violates neither Rule I–V nor Condition C.

I assume that the deviance of this sentence is due to the same principle mentioned in footnotes 13 and 15, i.e. one which militates against using a pronoun before a name when the opposite order is possible.

To the extent that my analysis is convincing, we have an argument for the thesis that syntax and pragmatics are not encapsulated. Specifically, syntactic information concerning constituency and pragmatic information concerning speech acts are intertwined at the syntax–pragmatics interface. I would note, in this connection, that the facts which we considered, and my analysis of them, in no way suggests a 'reductionist' view of pragmatics. The Performative Hypothesis does not dissolve speech act theory. Such questions as what it means to make an assertion, or what it means to ask a question, constitute the subject matter of speech act theory. To the extent that the Performative Hypothesis is correct, these become questions about TELL and ASK. That does not mean they cease to exist. The questions remain as relevant and interesting as they have been. The fact that TELL and ASK are present in the syntax does not mean that questions about their content, which are classic questions of pragmatics, are now 'reduced' to questions that can be answered in purely syntactic terms. What I hope to have conveyed, with my analysis, is that in trying to explain linguistic intuitions, we should not limit our vision to an 'exclusive' approach where the account has to be entirely syntactic or entirely pragmatic.

Readers of this paper probably know that many other languages are similar to English in that they do not allow nominal forms of address. I have mentioned the fact that several languages are similar to Vietnamese in that they do allow nominal forms of address: Japanese, Khmer, Thai, and Burmese, to name a few examples. It will be interesting to study each of these languages closely to see whether micro-variations exists between them and how these can be accounted for by extending the analysis proposed here. I leave this task to future research.

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