



Vietnamese kinship and status terms: their behavior under VP ellipsis

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Abstract In Vietnamese not only pronouns and anaphors but also kinship terms and status terms may yield sloppy interpretations. The aim of the article is to explore why in Vietnamese such terms, essentially common noun expressions, can be bound at all and what the underlying mechanism is for these expressions to obtain both strict and sloppy identity readings. We briefly discuss previous proposals by Pham (2011) and Trinh (2022) and show that they do not provide a convincing answer. We then present an extension of Higginbotham's (1983) analysis of possessive constructions, which, after a more general discussion of relational nouns, is applied to Vietnamese's relational nouns in particular. We argue that in Vietnamese nominal expressions based on a relational noun may contain a variable that is locally free, and hence can be bound by an external binder. We discuss a variety of Vietnamese in which kinship terms and status terms cannot yield sloppy readings when there is a mismatch in honorificity between these nominal expressions and their envisaged antecedents in the elided clause. By contrast, when there is a match in honorificity, both sloppy and strict readings are available. This is testimony to the important role of honorificity in the Vietnamese grammatical system. However, we found that other speakers show more variability in the judgments than was initially expected. We conclude with a discussion of this variation.

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1 Introduction

In recent years we have seen a substantial body of work on the intriguing patterns shown by anaphoric dependencies in Vietnamese; see for instance, works such as Pham (2011), Bui (2019), Trinh and Truckenbrodt (2018) and Trinh (2011, 2022). Of these, Pham (2011) and Trinh (2022) specifically address the type of issues that constitute the main topic of this contribution, namely the use of kinship terms such as *anh* ‘older brother’ and status terms such as *thầy* ‘teacher’ as elements that can be bound, similar to pronominals.¹ In order to avoid unnecessary repetition, we will henceforth frequently use the expression ‘kinship term’ to cover both kinship and status terms, since kinship and status terms behave similarly in relevant respects.

Like in English and many other languages, in Vietnamese, pronouns have two possible interpretations in a VP-ellipsis context, namely strict and sloppy readings (Ross 1967, Keenan 1971, Sag 1976, Partee 1978, Reinhart 1983a and many others). An illustration is given in (1):²

- (1) *Nam_i thích con chó của nó_i và Mai cũng vậy*
 Nam like CL dog POSS 3SG and Mai also so
 ‘Nam likes his dog and Mai does too.’
 a. ...and Mai likes Mai’s dog => Sloppy
 b. ...and Mai likes Nam’s dog => Strict

The interpretation in (1a) is in line with the common pattern that pronominals may yield sloppy identity readings.

To refer to discourse participants, Vietnamese uses not only pronouns, but also names and kinship terms. Both pronouns and kinship terms encode ‘honorificity’, i. e. they encode how you address someone who is older, younger, their social status, and whether a person is known to you or not. Moreover, in some cases kinship terms are used instead of pronouns, as reflected in Table 1.³

¹ Our discussion will be based on the first author’s variety of Vietnamese, checked with colleagues, and supplemented by surveys presenting examples in what one may consider the standard (Hanoi) variety of Vietnamese. That is, the sentences had a vocabulary neutral with respect to regional variation. Moreover, a 6-tone system was used (while Vietnamese speech in Central and South Vietnam has a 5-tone system), thus reflecting the language of administration and education, what one may consider the standard Hanoi variety of Vietnamese. See the appendix for more details.

² The following glosses are used: AUNT=aunt; BR=brother; BOSS=boss; CL=classifier; COMP= complementizer; DEM=demonstrative; ELD=elder; FUT=future; GRM=grandmother; GRF= grandfather; GRS=grandson; KIN=kinship; K-HON=kinship honorific; NIE=niece; PATTERN=paternal; PERF=perfect; POSS=possessive; PST=past; PROF=professor; PROG= progressive; SIS=sister; STA=status; TEA=teacher; UNC=uncle; YOU=younger.

³ See Luong (1990), Pham (2000), Tran (2009) for more detail.

Table 1 Discourse participants paradigm in Vietnamese

Register	1st	2nd	3 rd
Neutral	<i>tôi</i>	kin/stat/name	<i>họ</i>
Familiar	mình/kin/stat/name	mình/kin/stat/name	mình/kin/stat/name
Informal	<i>tao</i>	<i>mày</i>	<i>nó</i>

Not only pronominals, but also kinship and status terms can produce sloppy readings:⁴

- (2) [*Anh Nam*]_i thích con chó của [*anh ấy*]_i và [*anh Hùng*]
 KIN.ELD.BR Nam like CL dog POSS KIN.ELD.BR DEM and KIN.ELD.BR Hung
 cũng vậy
 also so
 ‘Nam likes his dog and Hung does too.’
 a. ...and brother Hung likes brother Hung’s dog => Sloppy
 b. ...and brother Hung likes brother Nam’s dog => Strict
- (3) [*Thầy Kiên*]_i ghét hàng xóm của [*thầy ấy*]_i và [*thầy Nam*] cũng vậy
 STA.TEA Kien hate neighbor POSS STA.TEA DEM and STA.TEA Nam also so
 ‘Kien hates his neighbors and Nam does too.’
 a. ... and teacher Nam hates teacher Nam’s neighbors => Sloppy
 b. ... and teacher Nam hates teacher Kien’s neighbors => Strict

Vietnamese in (2-3) contrasts with what one finds in Germanic languages, like English, Dutch or Frisian in these cases. In these languages, the use of kinship terms (like *anh*) or status terms with a proper name (like *thầy Nam*) referring to discourse participants is pragmatically highly restricted. For instance, in English nouns like *daddy* or *mummy* can be used to refer to discourse participants but only in a home setting when talking to (young) children. In the combination with proper names, it is unmarked only with nouns like *uncle*, *aunt* or *cousin* (*uncle Jerry*, *aunt Mary*, etc.). In all these cases the kinship relation is retained, but in the case of *uncle*, *aunt* the kinship relation can be lost, as in Vietnamese. In all these cases a repeated kinship term, for instance as a possessor, is rather odd, as in (4) with *uncle*. And, in so far as one can judge it at all, a sloppy reading is absent.

- (4) ??*Uncle Jerry* likes *uncle*’s dog and *uncle Bill* does too

The following questions, then, arise: Why can kinship terms and status terms be used in a pronominal capacity in Vietnamese and be bound? What makes such expressions distinct from their counterparts in English and other Germanic languages?

⁴ See also Trinh (2022) showing that kinship terms allow sloppy readings. This goes against Tran’s (2009) assumption that kinship terms are N-pronouns in the sense of Noguchi (1997).

Before we proceed it is important to determine the type of ellipsis, in examples as in (2-3). As has been shown in the seminal work by Hankamer & Sag (1976), English shows a distinction between what they refer to as *surface anaphora* and *deep anaphora*. In the case of surface anaphora, the ellipsis site must have a linguistically expressed antecedent from which to derive its interpretation. In the case of deep anaphora, any other observable event will do. Vietnamese has the same distinction. To see this, consider (5). We assume that *Nam* is the speaker, and that he reports on what *Mai* is doing. So, *Nam* is lighting a stick of incense, and he reports that *Mai* is doing the same. If so, both (5a) and (5b) are fine as a report.

- (5) Nam reports: Nam thắp một cây hương.
 Nam light one stick incense
 ‘I lit one stick of incense.’
- a. Mai cũng làm điều này. b. Mai cũng vậy.
 Mai also do thing this. Mai also so
 ‘Mai also did this.’ ‘Mai did too.’

Now, consider a situation where Nam does not utter anything, just making a hand movement indicating that he will light the incense. If so, there is a contrast between (6a) and (6b):

- (6) Moving his hands with a match towards a stick of incense, Nam reports:
- a. Mai cũng làm điều đó. b. #Mai cũng vậy.
 Mai also do thing that. Mai also so
 ‘Mai also does that.’ ‘Mai does too.’

In that case only (6a) with ‘do-it anaphora’ is acceptable, (6b) with *cũng vậy* is not possible. In our discussion we systematically use VP ellipsis with *cũng vậy*. As the test demonstrates, this type of ellipsis instantiates surface anaphora in Hankamer and Sag’s sense.

The article is organized as follows. Section 2 discusses two previous analyses, Pham (2011) and Trinh (2022), in which the intriguing issues raised by kinship terms in Vietnamese have been addressed. Section 3 explores what the binding conditions of kinship terms and status terms are. Section 4 presents the strict versus sloppy identity patterns in Vietnamese. Section 5 presents our account and indicates a complication due to the role of honorificity. In Sect. 6 we present the necessary background on honorificity in Vietnamese. In Sect. 7 we show how the complication indicated in Sect. 5 is resolved. Section 8 discusses variation. Section 9 is a conclusion.

2 An initial approach to anaphoric dependencies of kinship/status terms

For Pham (2011) the starting point is the apparent violation of condition C that 'bound' kinship and status terms reflect. Pham presents an instructive overview of several possible analyses, such as Lasnik (1986), Larson (2006), and Déchaine and Wiltschko (2002).

In our view Pham's main idea shared with Larson (2006) that kinship and status terms have a phi-head that is in some sense accessible from the outside is on the right track, but in the end the formal details of the implementation are not spelled out in the necessary detail.

Trinh (2022) is concerned with the fact that, in Vietnamese, speakers and hearers can refer to themselves by pronouns, proper names, or relational nouns. A language like English shows a *participant pronoun restriction*, which requires 1st or 2nd person pronominals to be used instead of proper names to refer to speakers or hearers. That is, in a sentence like *Mary will tie John's shoes* Mary will not be interpreted as the speaker nor John as the hearer in English, whereas in Vietnamese such construals are fine. For reasons of space, we cannot discuss Trinh's proposal in any detail. But we just note, that it relies on a preference for bound over coreferential construals based on a version of Rule I (Grodzinsky and Reinhart 1993). In English, a discourse construal of a proper name violates Rule I, while Vietnamese has a different setting for Rule I such that no violation obtains. However, as shown in Reinhart (2006), Rule I in this form cannot be correct.⁵ This raises problems for Trinh's analysis.

A further issue, noted by Trinh and Truckenbrodt (2018), is that, as observed in Reinhart (1983b), the participant pronoun restriction is less categorical than one might initially think. In fact, Reinhart considers it a "performance convention" which holds in certain cultures. And in a language like Frisian, for instance, which is closely related to English and Dutch, one finds a use of proper names and status terms as forms of address that is *prima facie* very similar to what one finds in Vietnamese.⁶

Trinh (2022) completes his analysis with a discussion of kinship and status terms (relational nouns in his terms). He notes that unlike proper names they allow a sloppy interpretation under ellipsis. Trinh proposes that relational nouns "when used as a pronoun" have the syntactic structure $[N(\alpha)]_n$, where α is a phonologically null expression of type e and n an index." The intuition is now that in principle α can receive a different value from the whole expression. The difference between Vietnamese and languages like English is, then, accounted for under the assumption that universal grammar blocks binding of α when the whole expression $[N(\alpha)]$ is

⁵ As Reinhart notes, (i) allows both a strict and a sloppy reading:

(i) Max likes his mother and Felix does too.

But if the availability of the bound variable reading simply blocks coreference, it is puzzling how (i) can have both. This then leads her to developing an alternative.

⁶ So far, a systematic analysis of this property of Frisian is not available, but see De Jong and Swarte (2014) and Hoekstra (2020) for some discussion.

bound. However, due to the different setting for Rule I, Vietnamese, unlike English, allows α to corefer with an expression outside $[N(\#)]$.

As noted, the version of Rule I that Trinh's analysis is based on is problematic. Moreover, it relies on syntactic indices. This goes against the inclusiveness condition (Chomsky 1995). We conclude, that, clever though it is, Trinh's analysis should be rethought.

As to the *participant pronoun* restriction, we feel that the simplest solution is provided by Reinhart's idea that it is based on a performance convention. If so, given the assumption that there is a locus for participant features in the left periphery (see, for instance, Delfitto and Fiorin 2011; Giblin 2016), one may assume that under the relevant pragmatic conditions, which may vary across linguistic communities, proper names and kinship terms may be linked to a [+participant] position in the left periphery, and consequently be interpreted as author or addressee in Vietnamese, and as addressee (but only quite marginally as author) in Frisian.

This paves the way for our discussion of the main topic of our contribution. The main focus of our analysis is a precise analysis of the availability of sloppy interpretations with kinship and status terms, and a restriction on sloppy interpretations that has not been discussed before, namely the effect of honorificity on matching.

As we will see, while strict readings of kinship and status terms are freely available, sloppy readings are more restricted. The import of this variation will be discussed in Sect. 7.

But first we will present an analysis of the availability of sloppy interpretations as such. In line with Chomsky (1995), we use an approach to binding without syntactic indices, specifically, using the definition of A-binding proposed in Reinhart (2006):

(7) A-binding (Reinhart 2006: 169-173)

α A-binds β iff α is the sister of a λ -predicate whose operator binds β

Crucially, it does not rely on syntactic indices, hence it is consistent with the inclusiveness condition (Chomsky 1995).

Consider the example in (8), with a logical syntax representation as in (8b), derived by *mỗi đứa trẻ* having undergone quantifier raising (QR), leaving a copy, here represented as a trace converted as the variable x (cf 8a), and the pronominal *nó* also being converted as x .

(8) [*Mỗi đứa trẻ*]_i nói rằng Mai đã mắng nó_i.

each CL child say COMP Mai PST scold 3SG

'Every child said that Mai scolded him/her.'

a. Every child [_{TP} $t=x$ [_{VP} said [_{NP} Mai scolded x]]]

b. Every child [_{TP} λx [_{TP} x [_{VP} said [_{NP} Mai scolded x]]]]]

As we saw in (2–3), kinship terms allow sloppy interpretations, which requires that such elements be interpretable as bound variables (as explained in Sect. 4.1). This is illustrated in (9):

- (9) [*Mỗi đứa trẻ*]_i nói rằng Mai đã mắng [*em ấy*]_i
 every CL child say COMP Mai PST scold KIN.YOU DEM
 ‘Every child said that Mai scolded him/her.’
 a. Every child [_{TP} t=x [_{VP} said [Mai scolded x]]]
 b. Every child [_{TP} λx [_{TP} x [_{VP} said [Mai scolded x]]]]

The question is why kinship and status terms can also have bound variable interpretations. This brings us to the next section.

3 Binding conditions on Kinship terms and Status terms

Kinship terms and status terms are essentially common noun expressions from a morpho-syntactic perspective, and differ from pronouns, in that they can be modified by a demonstrative or can be preceded by a numeral, as illustrated respectively in (10) and (11):

- (10) a. [*Cái anh / thầy đó*] xấu nhất trong nhóm.
 CL KIN.ELD.BR / STA.TEA DEM ugly most in group
 ‘That older brother/teacher is the ugliest in the group.’
 b. *[*Nó đó*] xấu nhất trong nhóm.
 3SG DEM ugly most in group
 ‘*That (s)he is the ugliest in the group.’
- (11) a. [*Hai em / thầy*] đã đi thư viện.
 TWO KIN.YOU / STA.TEA PST go library
 ‘Two younger sister/brother / teacher went to the library.’
 b. *[*Hai nó*] đã đi thư viện.
 two 3SG PST go library
 ‘*Two (s)he went to the library.’

Kinship terms and status terms have uses that are quite similar to the use of pronouns but, unlike these, they are not specified for person features. Instead, when used as pronouns they depend on the contextual relation to the speaker to determine which participant they stand for (see Trinh 2022 and Trinh and Truckenbrodt 2018, discussed above):

- (12) a. *Bác* đang xem tivi.
 KIN.UNC PROG watch TV
 = ‘I am watching TV.’
 = ‘He is watching TV.’
 b. *Bác* đang xem tivi à?
 KIN.UNC PROG watch TV Q?
 = ‘Are you watching TV?’
 = ‘Is he watching TV?’

Without a specific context, (12a) is ambiguous. The kinship term *bác* ‘uncle’ in the subject position can be interpreted as the (male) speaker or as a non-participant, but not as the addressee. By contrast, when occurring in an interrogative sentence, the same kinship term in (12b) is interpreted as the addressee or a third party. Like pronouns (see Tran 2009, Doan 2022), kinship terms or status terms do not take an antecedent in their local domains but do allow a non-local antecedent.⁷

Note, however, that interpretation as speaker or addressee is not available for kinship terms that are modified by a demonstrative. If modified by a demonstrative, they can only be interpreted as non-participants, making them equivalent to 3rd person pronominals.

As one may expect, a kinship or a status term may pick up an individual from the context as its value, which may be identical to the value of an element in the preceding discourse. That is, they are coreferential, see (13):

- (13) a. [Son]_i đã đi thư viện. [Em]_i rất nghiêm túc.
 Son PST go library. KIN.YOU very serious
 ‘Son went to the library. He is very serious.’
 b. [Thầy Son]_i đã đi thư viện. [Thầy ấy]_i rất nghiêm túc.
 STA.TEA Son PST go library. STA.TEA DEM very serious
 ‘Son went to the library. He is very serious.’

Kinship terms and status terms cannot be anteceded by pronominals, but they are allowed to antecede pronominals. Additionally, a descriptive NP can antecede kinship and status terms but not vice versa. These condition C effects are illustrated in (14) and (15):

- (14) a. *Nó_i bảo [em ấy]_i sẽ đến.
 3SG say KIN.YOU DEM FUT come
 ‘He/she said that he/she would come.’
 b. [Em ấy]_i bảo nó_i sẽ đến.
 KIN.YOU DEM say 3SG FUT come
 ‘He/she said that he/she would come.’

 (15) a. [Thầy dạy Toán]_i đang ủng hộ đội của [thầy ấy]_i
 STA.TEA teach Math PROG support team POSS STA.TEA DEM
 ‘The math teacher is supporting his team.’
 b. *[Thầy ấy]_i đang ủng hộ đội của [thầy dạy Toán]_i
 STA.TEA DEM PROG support team POSS STA.TEA teach Math
 ‘The math teacher is supporting his team.’

⁷ A reviewer notes that Vietnamese doesn’t show such a strong condition B in the case of pronouns and kinship/status terms. We refer the reader to Tran (2009:63–64) and Doan (2022:149–164) claiming condition B effects in both these cases. Bui (2019) shows a clear condition B effect in the case of *quantifier binding* (cf. 7). Bui argues that in the case of *coreference* of pronominals Vietnamese seems indeed to be more lenient than English in condition B effects due to a difference in the effects of rule I. (Bui 2019:45).

These examples satisfy a ‘Hierarchy of Referentiality’ (Pham 2011), based on Lasnik (1986)’s insights that a more referential expression can c-command a less referential covalued expression, but not vice versa (see also Ariel 1990).

Since kinship terms and status terms may be close to pronominals in their use, the question is whether they also yield both coreferential and bound variable readings. And, as we will see, in fact, they do. The question is what allows them to do so, since their counterparts in other languages and language families such as Germanic, Romance and other languages from the Indo-European language family do not allow bound variable construal of kinship and status terms. In the following section, we will discuss in more detail how kinship terms and status terms obtain their interpretations under the VP-ellipsis context.

4 Sloppy versus strict identity in Vietnamese

4.1 Preliminaries

A standard way to test for coreference and binding is provided by contrasting interpretations under VP-ellipsis as in (16).⁸ Pronominals in principle allow both readings, as we saw (cf. 1). Reinhart’s definition of binding allows us to represent the difference in a more formal way, as in (16a) versus (16b), where (16a) represents the bound variable (sloppy) reading and (16b) the coreferential (strict) reading:

- (16) [Anh Nam]_i bán quyển sách của *anh*_i và [anh Hùng]_j
 KIN.ELD.BR Nam sell CL book POSS KIN.ELD.BR and KIN.ELD.BR Hung
 cũng vậy.
 also so
 ‘Nam sells his book and Hung does so.’
- a. *Anh Nam* (λx (x sells *anh*’s $\rightarrow x$ ’s book) and
 anh Hùng (λx (x sells *anh*’s $\rightarrow x$ ’s book) $\Rightarrow$ Sloppy
- b. *Anh Nam* (λx (x sells *anh*’s = *anh Nam*’s book) and
 anh Hùng (x sells *anh*’s = *anh Nam*’s book) $\Rightarrow$ Strict

We see essentially the same pattern as in (1), where the kinship term *anh* is rendered as a variable to yield the sloppy reading. In terms of a copying-pasting procedure, a strict reading obtains if copy-pasting applies to the λ -expression after the possessive *anh* is valued as *anh Nam*; a sloppy reading obtains if binding applies before *anh* is valued. The difference is, then, a matter of timing. So, the question is how kinship terms like *anh* optionally combined with the determiner *ấy*, being a subtype of a common noun expression, can be bound whereas their counterparts in other language families cannot. We can avoid a brute force stipulation by showing that,

⁸ There is a considerable literature on the proper representation of ellipsis. See, for instance, Merchant (2001, 2008, 2013) and specifically Elbourne (2008), who analyzes ellipsis sites as silent definite descriptions with an interpretation based on accessing the context. For current purposes, however, the copying and pasting procedure we assume will be sufficient.

for independent reasons, *anh* (áy)'s logical syntax representation contains a variable that is available for binding. This is actually quite straightforward.

That common noun expressions contain a variable has already been argued by Higginbotham (1983). For instance, informally, the LF representation of an expression like *every man* is taken to be [*every x: man* (*x*)] (= every *x*, such that *x* is a man), where *x* has type *e*, reflecting that it ranges over individuals. Similar representations are given to other determiners. This entails that the variable in the representation of DP's will in principle always be bound within the DP, and hence not be available for binding by an external operator. Higginbotham argues that the possessive constructions as in (17a) are interpreted as in (17b), and more abstractly as (17c), where *R* stands for a possessive relation:

- (17) a. John's cat $\rightarrow$ [_{NP} NP₁'s N']
 b. [the *x*: cat' (*x*) & R (*x*, John)] c. [the *x*: N' (*x*) & R (*x*, NP₁)]

Note, however, that the semantic structure of kinship and status terms is more complex since they are intrinsically relational. A brother is always the brother of someone, a teacher is the teacher of someone. In the next section we will discuss the difference between sortal nouns and relational nouns, and in particular kinship terms, in more detail, and see how this difference provides a variable allowing kinship terms in Vietnamese to be bound.

4.2 Relational nouns

As discussed in Barker (2011) the denotation of a common noun such as *male* – also referred to as a *sortal* noun- can be modeled as a simple set of individuals. Then *Bill* is male just in case **b** ∈ [[male]]. A noun like *brother*, in contrast, denotes a relation between individuals, that is, a set of pairs of individuals. Then *Bill* will be a brother of *John* just in case <**b**,**j**> ∈ [[brother]]. This relational character is lexically represented.

Within the class of relational nouns, kinship terms have some particular characteristics. While a noun like *enemy* represents a relation in some sense (an enemy is always the enemy of someone), it does allow the postnominal genitive: *an enemy of John's*. Moreover, expressions such as *the enemy* or *an enemy* need very little context to be felicitous, contrary to kinship terms like *brother*, *sister*, *uncle*, *aunt*, etc. Expressions like ??*A/Every brother left the room*, etc. feel strongly incomplete, and require a post-nominal genitive, as in *a brother of John*, *the brother of John*, or a very particular context to be felicitous. In the case of ??*the brother* either *the brother of John* is to be used or *John's brother*, with a prenominal genitive, or again, a very particular context is required.

Crucially, then, unlike sortal nouns, kinship terms cannot stand on their own. In this sense, then, they are semantically 'weaker' than sortal nouns.

Also note the following fact: kinship terms can be combined with a proper name, as in *uncle Joe*, *aunt Mary*. In such cases, the second member in the relation cannot be postnominally specified: **uncle Joe of John*. So, descriptively one can say that kinship terms in English need to be anchored via their first argument, or via their

second argument. In the latter case, if the second argument, the relational argument, is a pronominal (or in relevant languages an anaphor), a dependency can be expressed with another argument, as in (18):

- (18) a. Mary admired her uncle.
 b. Mary admired [_{NP} pro₁'s [_{N'} uncle]]

Here, *her uncle* most plausibly refers to Mary's uncle, but *her* may also be free and *her uncle* may also refer to some other person's uncle if that other person is contextually suitably specified. It is natural to assume that the distinction between first and second argument is structurally represented. The first argument (the variable in the set expression in Higginbotham's terms) is then construed as the *referential* argument, while the second argument is external, see Löbner (2016) for discussion.⁹ Using a standard notation from the literature (see Bassaganyas-Bars 2017 for a useful overview), the logical syntax representation of *uncle* can then be given as in (19a). We assume that the relational character of kinship terms is structurally represented. In fact, the relational part should be represented independently from the set expression, with the uncle relation indicated by R_{uncle} as in (19b):

- (19) a. $\lambda x. \lambda y. (\text{uncle-of}' x, y)$
 b. $\lambda x. \lambda y. (R_{\text{uncle}} (\text{uncle}' x), y)$

In (19b) R_{uncle} consists of pairs $\langle x, y \rangle$ such that x ranges over potential uncles - *uncle'* (x) - (reflecting a suitable class of male individuals), and y over potential nephews/nieces. For expository reasons we use *uncle'* as the restrictor of the referential argument. However, its descriptive content is very low (essentially just *male*). The bulk of the meaning of the noun *uncle* is represented in the relation R_{uncle} , the set of pairs $\langle x, y \rangle$ such that x is an uncle of y . This representation accounts for the fact that such relational nouns feel so strongly incomplete in the absence of a possessive expressing the relational component, such as *??the/an uncle*.

Applying a pronominal genitive, as in *John's uncle*, then, has two effects. It binds the external variable and introduces an operator to bind the referential variable (as in (17)), thus yielding a definite description able to serve as an argument. So, if we have the pronominal genitive *John's* the result is as in (20a). The restriction on expressions like *uncle Joe* can be captured by the assumption that realization of the referential argument goes with existential closure of the external argument as in (20b):¹⁰

⁹ To cite from Löbner's (2016: 285) discussion of relation nouns: "With *my daughter*, the relational argument is specified as the speaker, while the speaker's daughter is the referential argument. (...) The referent of an NP with a relational nucleus can only be determined if the correlate is specified, or retrieved from context, or if the relational concept is shifted to an absolute concept. Explicit specification of the relational argument usually takes the form of a possessive construction, whence we will refer to the correlate as the 'possessor'."

¹⁰ Note that under special discourse conditions involving a contrast, existential closure does not take place, and a definite determiner can be used as in *I'm talking about THE uncle Joe*. This may also account for examples like *John's uncle Joe*, for which we thank an anonymous reviewer.

- (20) a. $\lambda x \lambda y (R_u(\text{uncle}' x), y)) + \text{Nom}_{\text{gen}} \rightarrow (\text{the}_x (R_u(\text{uncle}' x), \text{John}))$
 $[\text{the}_x : \text{uncle}' (x) \ \& \ R_u(x, \text{John})]$
 b. $(\lambda x \lambda y (R_u(\text{uncle}' x), y)) + \text{PN} \rightarrow (\text{the}_x (R_u(\text{uncle}' \text{Joe}), y))$
 $[\text{the}_x : \text{Joe}(x) \ \& \ \text{uncle}'$
 $(x) \ \& \ \exists y. R_u(x, y)]$

So, in (20a) what we get is that individual, such that it is a member of the set of potential uncles and is in fact an uncle of John. What we get in (20b) is an individual called *Joe*, such that it is a member of the set of potential uncles and there exists some individual (either contextually or conventionally specified) that *Joe* is an uncle of. If the Nom phrase in (20) is a pronominal such as *her* instead of a proper name like *Mary*, the external variable will be ‘typed’ as *fem*, that is it is restricted to ‘feminine’ individuals, but remains locally free, as in (21a). It can be bound to yield (21b,c):

- (21) a. $\lambda y_{\text{fem}} (\text{the}_x (\text{R}_{\text{uncle}} (\text{uncle}' x), y_{\text{fem}}))$
 b. $\text{Mary}_{\text{fem}} (\lambda y_{\text{fem}} (y_{\text{fem}} \text{adores} (\text{the}_x (\text{R}_{\text{uncle}} (\text{uncle}' x), y_{\text{fem}}))))$
 c. Mary adored her uncle

While (21a) sounds odd if the genitive is omitted (*Mary admired (the) uncle*) irrespective of the presence of a definite article, an expression like *mother* or *mommy* is fine in the absence of an overtly expressed genitive (under certain contextual conditions), as in (22a). One may assume then that in the absence of an overt possessor the representation of relational nouns such as *mother/mommy* may contain a silent pronominal element *pro* (see Simpson and Pham 2025 for more discussion), as in (22b). This *pro* can only be properly valued depending on discourse conditions (note that the relevant kinship relation is now R_{mother} instead of R_{uncle}).

- (22) a. Masha loves *mother/mommy*.^a
b. Masha loves [the_x (R_{mother} (mother' x), pro)]

^a In special contexts also a term like *aunty* can be used in this manner

So, the interpretation of *mother/mommy* is determined by the contribution of three factors, namely the restriction *mother'*, the relation R_{mother} and the conditions on the interpretation of *pro*. Interestingly, the most prominent interpretation is that *Masha* loves the speaker's mother. That is, the silent *pro* is valued as the speaker. This is facilitated by the unicity of the mother-of relation. Each individual has one and only one birth mother. This accounts for the fact that in the absence of an overt possessive, nouns like *mother* or *mommy* only allow a strict reading in ellipsis sentences, as in (23):

- (23) Masha loves *mother/mommy* and Dory does too.

Even if *Dory* has a different mother than *Masha* has, the interpretation can only be that *Masha* and *Dory* love the same unique individual, namely the speaker's mother. It is this very special relationship that distinguishes terms such as *mother* or *father* in languages like English from *uncle*. Consequently, sentences such as *a mother loves her children* are quite a bit more natural than *an uncle loves his nephews* (given our cultural biases).

Given these preliminaries we can move to the issue of how kinship terms in Vietnamese can be bound, focusing on the case of ellipsis.

5 On binding of Vietnamese kinship terms

The starting point of the analysis is the contrast between sortal nouns and kinship terms already observed for English. As we saw, the referential argument in kinship terms is semantically weaker, that is less restricted than its counterpart in sortal nouns. Vietnamese kinship terms such as *anh* 'elder brother' or *em* 'younger brother/sister' in their pronominal use are weaker still. Not only is the restriction on the referential argument trivial compared to what one sees in sortal nouns – in this case just a restriction to male individuals – as is also true for English, but the kinship relations R_{kin} themselves are restricted in a rather different way.

For instance, the relation R_{anh} in the structure of *anh* 'elder brother' is not restricted in terms of substantive brother-properties, as in its English counterpart *brother*. Rather, the restriction is that the referent of *anh* must stand in a proper honorificity relation to the speaker in order to warrant the use of *anh* instead of, for instance, *em* 'younger brother/sister'. Thus, Vietnamese kinship terms such as *anh* differ from their counterparts such as *brother* in English in the nature of the restriction expressed by R_{anh} , namely the restriction expressed by their relational component reflects the honorificity relation. We will generally represent the relational component of these kinship expressions as R_{k-hon} .

The structure of *anh Nam* and *anh Hùng* will be taken to be comparable to that of *uncle Joe*, or *aunt Mary* with the proper name expressing the referential argument. Here the external argument of *anh* is existentially bound, again with R_{k-hon} expressing the honorificity relation between the discourse participants

In order to account for the fact that kinship terms in Vietnamese can be bound like pronominals they should correspond to variables in *logical syntax*. While the structure of standard pronominals as bundles of phi-features is such that they are rendered as variables of type *e* (possibly of a subtype reflecting person, number of gender), kinship terms have a more complex structure, as in (24). See our previous discussion:

(24) [$the_x (R_{k-hon} (kin' x), pro)$]

Thus, potential sources of variables they contain are in the set expression *kin' x* of the referential argument, which is internally bound and in the locally free variable – here provided by *pro* – of the relational argument. In order to sort this out, let us take the simple case of a kinship term in argument position.

As noted in Sect. 3, kinship terms do not allow a local antecedent in the absence of a licenser, but in the presence of the reflexive marker *tự* they do, as do pronouns. See, (25):

- (25) [Anh John]_j nghi ngờ rằng [anh Hùng]_i tự đánh thuốc [anh ấy]_i.
 KIN.ELD.BR John doubt COMP KIN.ELD.BR Hùng self hit drug KIN.ELD.BR DEM
 ‘Elder brother John suspects that elder brother Hung poisoned himself.’

Here the complement has a reflexive interpretation (Doan 2022).¹¹ That is, at some level of representation the complement clause must have the structure in (26) (with KIN an informal category label), expressing that Vietnamese kinship terms contain a variable that can be bound from the outside.

- (26) Hung (λx (x, [_{KIN}...x...]))

This is unlike what we see in English. Witness the fact that expressions like **Brother John hides brother* and **Brother John self-hides brother* are totally impossible. The question is then how to link the variable *x* in (26) to a possible source in (24). It is easily seen that the *x* in [_{KIN}...x...] cannot come from the *pro* in (24). To put it informally, *Hung* does not lock up his elder brother, he locks himself up. Consequently, the source of the *x* in [_{KIN}...x...] must be the referential argument. But, since in the English equivalents the referential argument is internally bound by the operator *the_x*, as indicated in (24), we must assume that in Vietnamese kinship terms no such operator binding the referential argument is introduced. In the absence of such an operator, the *x* in the set expression is available for binding from the outside. This is enough to account for the ‘pronominal’ character of kinship terms in Vietnamese.

- (27) Kinship terms in Vietnamese allow their referential argument to be externally bound due to the absence of an internal binder.

The possibility for such an internal binder to be absent may well be related to the lack of substantive properties in the restriction on the external argument.

What we have is a locally open expression, restricted to male individuals in a kinship relation to the speaker, satisfying honorificity requirements as in (28):

- (28) λx [x: anh' (x) & R_{k-hon} (x, speaker)]

This paves the way for a further analysis of the VP-ellipsis constructions we started discussing. For illustration consider (16) repeated as (29):

¹¹ In our last survey (see appendix) only one speaker provided a non-local interpretation. 15 selected a reflexive interpretation of the complement clause as the only option.

- (29) [Anh Nam]_i bán quyển sách của anh_i và [anh Hùng]_j
 KIN.ELD.BR Nam sell CL book POSS KIN.ELD.BR and KIN.ELD.BR Hung
 cũng vậy
 also so
 ‘Elder brother Nam sells his book and so does elder brother Hung.’

To derive the relevant interpretations, note that the subject *anh Nam* will have the more detailed structure [the_x: Nam (x) & anh’ (x) & R_{k-hon} (x, speaker)]. Or, in words, *that individual x such that x=Nam and x is a member of the class anh’ (essentially the class of male individuals) and qualifies as an elder brother in the perspective of the speaker*. Since details of its internal structures do not matter at this point, we can simply use *anh Nam* in the derivations.

The relevant steps are represented in (30), providing a more explicit derivation of the pattern presented in (16):

- (30) A sample derivation
- i Apply QR (see (8)) to *anh Nam*, which ends up prefixed to an λ -expression.
 - ii. Represent the possessor *anh* as λx [x : anh’ (x) & R_{k-hon} (x, speaker)]
 Together this yields:
 - iii. anh Nam (λx (x bán [quyển sách của [x : anh’ (x) & R_{k-hon} (x, speaker)]]))
 KIN.ELD.BR Nam sell CL book POSS KIN.ELD.BR

In words: Anh Nam sells CL book such that it is possessed by an individual *x*, member of the class anh’ (the class of males), and qualifying as elder brother in the perspective of the speaker. One option is now for the λ -expression of the antecedent clause to be copied and pasted into the consequent clause after valuing *anh* as *anh Nam*, yielding the strict reading in iv. One can assume that *anh* can be referential like a pronominal if the option of internal binding is available. Hence coreference with *Anh Nam* is possible.

- iv. anh Hùng (λx (x bán quyển sách của anh Nam))
 KIN.ELD.BR Hung sell CL book POSS KIN.ELD.BR Nam

The other option is for the λ -expression of the antecedent clause to be copied and pasted before valuing *anh*. This yields the sloppy reading in v, where the subject of the consequent clause binds the possessive.

- v. và anh Hùng (λx (x bán quyển sách của [x : anh’ (x) & R_{k-hon} (x, speaker)]))
 and KIN.ELD.BR Hung sell CL book POSS KIN.ELD.BR

The contrast between the strict and sloppy interpretations, then, reduces to a timing difference along the lines discussed earlier in (16), namely whether or not the subject of the second conjunct applies to the λ -expression before (sloppy) or after (strict) valuation of the *anh*-expression in the possessive, just like when we have a simple possessive pronoun.

In Sect. 3 we discussed that kinship terms can be interpreted as the speaker, the addressee, or as a non-participant. Observe the example in (31) with a speaker interpretation of the subject of the antecedent clause. In such cases both a strict and a sloppy interpretation are available. This requires a representation of the speaker in the structure. The availability of such a representation follows from the analysis in Doan (2022), Doan et al. (2024), who argues that Vietnamese root clauses may optionally be embedded under a performative structure containing a silent speaker pronoun.¹² A specific assumption we introduce is that this speaker pronoun can value the referential argument of *anh*, yielding the same structure as in *anh Nam* in (29), with *Nam* replaced by Speaker (or Addressee where relevant) resulting in [the_x : Speaker (x) & anh' (x) & R_{k-hon} (x, Speaker)], to be abbreviated as *anh-sp* as in (31b,c).¹³

- (31) a. [*Anh*] thích quyển sách của *anh* và [*anh Hùng*]
 KIN.ELD.BR like CL book POSS KIN.ELD.BR and KIN.ELD.BR Hung
 cũng vậy.
 also so
 'I like my book and Hung does too.'
- b. [_{CP} [*anh-sp*] [_{VP} like [book-of [*anh*]]] and [_{CP} [*anh-Hùng*] [_{VP}...] too]
- c. [*anh-sp*] (λx (x [_{VP} like [book-of [*anh-x*]]])) and [*anh-Hùng*]
 (λx [_{VP}...] too]
 Strict: *Anh_i thích quyển sách của anh_i và anh Hùng cũng thích quyển sách của anh_i.*
 'I like my book and elder brother Hung also likes my book.'
 Sloppy: *Anh_i thích quyển sách của anh_i và anh Hùng_j cũng thích quyển sách của anh_j.*
 'I like my book and elder brother Hung also likes his book.'

So, while structurally *anh-sp* is no different from *anh Nam*, what is different is that this component is silent and licensed by the performative frame.

Summarizing, the simplest account for the contrast with languages like English, or Dutch is that kinship terms in Vietnamese allow their referential argument to be bound by an external binder due to the absence of an internal binder that would block this by minimality.

In the cases discussed we had repetition of a kinship term. In the case of repetition of names (Trinh 2022: 224; Doan 2022:87) and repetition of a kinship term and a proper name, such as *anh Nam* (Doan 2022:87), only the strict reading is available. Our surveys also showed that there is regional variation.¹⁴

¹² This analysis is inspired by Ross (1970), who proposed that every sentence is embedded under a performative frame: a covert syntactic structure containing a representation of the speaker, the hearer and a performative verb. As shown in Doan et al. (2024) the performative frame must in fact be optional.

¹³ Note that the second conjunct is still necessary to express the honorificity requirement.

¹⁴ The presence of strict readings in the case of repeated (kinship and) proper names indicates that, although superficially similar, the phenomenon of repeated arguments in Vietnamese is essentially different from what we find in San Lucas Quiaviní Zapotec and Thai, as discussed by Lee (2003), who argues that repetition of arguments in these languages results from movement. Given that analysis, one would expect an obligatory sloppy interpretation, contrary to fact.

We can now proceed with the discussion of an intriguing fact: In the 1st author's variety of Vietnamese, as well as for the consultants from the middle region of Vietnam in a subsequent survey (see the Appendix), the subjects of the antecedent clause and the consequent clause must match in honorificity in order to allow a sloppy reading.¹⁵ If there is no match in honorificity, only the strict reading obtains. While matching effects can also be observed in other languages, matching effects based on honorificity have not been studied in much detail. First an excursion is needed into honorificity as a special property of the Vietnamese anaphoric system.

6 Intermezzo: Honorification and the hierarchy of honorifics in Vietnamese

Honorification reflects relationships between individuals involving social status, respect or deference, which is linguistically encoded by a class of honorific items. Different languages may use different ways to represent the speaker's honorific attitude towards the other participants. German/French employs a two-way pronominal contrast/verbal conjugation to distinguish honorifics from non-honorifics. German uses an intimate form known as *du* ('you') and a polite form *Sie* in addressing the hearer based on the speaker-hearer relationship and so does French with *tu-vous*. Other languages utilize a system of suppletives and inflection to express honorification such as Japanese, Javanese and Hindi.

The use of honorific forms in Vietnamese is determined by several factors, including age and social status (cf. Thompson 1965). The higher the age or the social status of interlocutors is, the more deference is paid to those individuals, which gives rise to a system of honorification, which, as we will see in the next section, plays an important role in the expression of anaphoric dependencies.

The pronominal system in Vietnamese can be stratified into several levels of deference and politeness. There is no dedicated form for the first person at the familiar level; there are no second person forms at the neutral, superior and familiar levels and no third person forms at the superior and familiar levels (cf Table 1). Occupying the neutral position are *tôi* 'I' and *họ* '(s)he'. At the familiar level, as in a conversation between husband and wife or between close friends or peers, the elements lowest on the honorificity scale are used: *tao* 'I', *mày* 'you' and *nó* '(s)he'. The use of these expressions is impolite and disrespectful, except when used among peers in situations where respect needs not be expressed. Apart from these, *mình*, not marked for person, is also non-honorific when used to refer to the speaker or the addressee.

In comparison with pronouns, the honorificity hierarchy of kinship terms and status terms is more explicit in that the position of these expressions in the hierarchy is based on age in the relation with the speaker and social status of the participant. Generally, kinship/status terms can be used as honorificity markers in society to express politeness and respect, whereas in a family context kinship terms express hierarchy. In the case of kinship terms, *ông* 'grandfather', *bà* 'grandmother', for

¹⁵ One of the reviewers notes that for some native speakers the use of any distinct kinship term, such as distinctions triggered by gender differences, leads to a blocking of a sloppy identity reading, even when the kinship terms match in honorificity.

instance, are used as markers of a high degree of honorificity by younger speakers; using *em* ‘younger brother/sister’, *con* ‘son/daughter’ marks low or non-honorificity. Status terms, such as *thầy* ‘male teacher’, *cô* ‘female teacher’, for instance, are ranked high in terms of honorificity.¹⁶

Bare proper names belong to the non-honorific type. Proper names may represent honorification if combined with honorific marked kinship/status terms, either indicating high honorificity (*ông Minh*, *thầy Kiên*), or low-honorificity forms (*em Mai*).

7 The Honorificity Restriction explained

The effect of the matching requirement is illustrated in (32a), and (33a). Here, only a strict interpretation obtains, unlike in (32b) and (33b), where both are allowed. As we argue, this is due to the fact that in (32a) there is a discrepancy in terms of honorificity between the subject realized as a high honorific form *anh Nam* ‘brother Nam’ of the first conjunct and the subject *bác Trung* ‘uncle Trung’ of the second conjunct, since *bác Trung* is a higher honorific form. Thus, in (32a) we have a ‘high-higher’ pattern. If we replace *bác Trung* with the bare proper name *Mai* we have a ‘high-low’ pattern and, again, a sloppy reading is not available. In (32b) the honorificity marking in both conjuncts is the same, thus allowing both a strict and a sloppy reading. A similar contrast occurs with the status terms in (33a) and (33b).

- (32) a. [Anh Nam]_i thích con chó của [anh ấy]_i và *bác*
 KIN.ELD.BR Nam like CL dog POSS KIN.ELD.BR DEM and KIN.UNC
Trung cũng vậy.
 Trung also so
 ‘Brother Nam likes his dog and uncle Trung does too.’
 ≠ Brother Nam likes brother Nam’s dog and uncle Trung likes
 uncle Trung’s dog.
 = Brother Nam likes brother Nam’s dog and uncle Trung likes
 brother Nam’s dog.
- b. [Anh Nam]_i thích con chó của [anh ấy]_i và [anh Hùng]_j
 KIN.ELD.BR Nam like CL dog POSS KIN.ELD.BR DEM and KIN.ELD.BR Hung
 cũng vậy.
 also so
 ‘Brother Nam likes his dog and brother Hung does too.’
 = Brother Nam likes brother Nam’s dog and brother Hung likes
 brother Hung’s dog.
 = Brother Nam likes brother Nam’s dog and brother Hung likes
 brother Nam’s dog.

¹⁶ See Luong (1990) for indications that an even richer system of gradations may be required and that the speech context plays an important role.

- (33) a. $[Thầy Kien]_i$ ghét hàng xóm của $[thầy ấy]_i$ và Nam_j cũng vậy.
 STA.TEA Kien hate neighbor POSS STA.TEA DEM and Nam also so
 ‘Kien hates his neighbors and Nam does too.’
 $\neq$ Teach.Kien hates teach. Kien’s neighbors and Nam hates Nam’s neighbors.
 $=$ Teach. Kien hates teach. Kien’s neighbors and Nam hates teach. Kien’s neighbors
- b. $[Thầy Kien]_i$ ghét hàng xóm của $[thầy ấy]_i$ và $[thầy Nam]_j$
 STA.TEA Kien hate neighbor POSS STA.TEA DEM and STA.TEA Nam
 cũng vậy.
 also so
 ‘Kien hates his neighbors and Nam does too.’
 $=$ Teach.Kien hates teach.Kien’s neighbors and teach.Nam hates teach. Nam’s neighbors.
 $=$ Teach.Kien hates teach.Kien’s neighbors and teach.Nam hates teach. Kien’s neighbors.

The question is, then, how to derive this effect and how to accommodate varieties in which such an effect is weaker or even absent.

As discussed in Sect. 5, we assume that in VP-ellipsis, the λ -expression of the antecedent clause is copied and pasted into the elided VP to yield its interpretation, as in (34), based on the sample derivation in (30):

- (34) Anh Nam $(\lambda x (x \text{ bán } [\text{quyền sách của } [x: \text{anh'} (x) \ \& \ R_{k-hon} (x, \text{speaker})]]))$ và cũng vậy.
 KIN.ELD.BR Nam sell CL book POSS KIN.ELD.BR and also so
 $[\text{anh Hùng}]_j \ (\lambda x (x \text{ bán } [\text{quyền sách của } [x: \text{anh'} (x) \ \& \ R_{k-hon} (x, \text{speaker})]]))$

This presupposes that the subject in the consequent clause is indeed able to apply to the pasted expression. In (34) we use variables without an explicit restriction. However, as discussed earlier, variables may be restricted in the values they may receive, to be reflected in their type. Suppose *anh Nam* and the *subject* of the consequent clause differ in a relevant type and the type of *anh Nam* is reflected in the type of the variable in the possessive *anh*, the *Subject* will not be able to bind the occurrence of the possessive *anh* in the pasted λ -expression. To account for the effect of honorification, it is sufficient to assume that honorification is reflected in the type of the variable in the possessive. Note, that we do not have to assume a separate honorificity *feature*, since by assumption honorificity is already represented in the relational part R_{k-hon} of the representation of *anh* and other kinship terms. The only further assumption we must make is that this property is represented in the variable type. If the variable in the possessive and the binder in the elided VP match each other in terms of honorification, binding can take place.

Example (35) represents (32) with the effect of honorificity made explicit.¹⁷ For perspicuity’s sake we will simplify the representations. In a nutshell, the possessive

¹⁷ See for instance Potts (2007) for a proposal to represent expressiveness (honorificity) as part of the feature structure of pronouns.

anh ấy matches in type with *anh Nam*, hence can be bound by it, but not with *bác Trung*, hence cannot be bound by the latter. As discussed, the possessive *anh ấy* contains a variable, which we now assume to be typed for honorificity indicated by *anh* $x_{[H]}$ *ấy*. Assuming that *anh Nam* has the same type, *anh* $x_{[H]}$ *ấy* can be bound and be valued as *anh*_[H] *ấy* *Nam*. In (35a) this typing leads to a mismatch in the consequent clause, since the envisaged binder *bác Trung* has a different level of honorificity (taken to be represented in its R_{k-hon}). Assuming that this is reflected in a different typing of the variable, let's say as H' , it cannot therefore bind *anh* $x_{[H]}$ *ấy*.

- (35) a. [Anh Nam]_i thích con chó của [anh ấy]_i và *bác*
 KIN.ELD.BR Nam like CL dog POSS KIN.ELD.BR DEM and KIN.UNC
Trung cũng vậy.
Trung also so
 'Brother Nam likes his dog and uncle Trung does too.'
 ≠ Brother Nam likes brother Nam's dog and uncle Trung likes uncle Trung's dog.
 = Brother Nam likes brother Nam's dog and uncle Trung likes brother Nam's dog too
- a. *Anh*_[H] *Nam* (λx (x likes *anh* $x_{[H]}$ *ấy* $\rightarrow$ *anh*_[H] *Nam*'s dog) and *bác*_[H'] *Trung* (λx (x likes *anh* $x_{[H]}$ *ấy* $\rightarrow$ *bác*_[H'] *Trung*'s dog) = > *Sloppy
- b. *Anh*_[H] *Nam* (λx (x likes *anh* $x_{[H]}$ *ấy* = *anh*_[H] *Nam*'s dog)) and *bác*_[H'] *Trung* (λx (x likes *anh* $x_{[H]}$ *ấy* = *anh*_[H] *Nam*'s dog)) = > Strict

Summarizing, the distribution of strict versus sloppy readings follows if the variable in *anh* x of the antecedent clause is typed for honorificity and cannot be bound by an antecedent with a non-matching type. Note that the analysis is based on intrinsic differences in honorificity and the way these are reflected in variable typing.¹⁸

This derives the pattern discussed.¹⁹ The pattern with status terms in (33) follows as well if honorificity features are added. In (33a), a mismatch in terms of honorification between the copied status term *thầy ấy* and the envisaged binder *Nam* in the elided clause blocks the sloppy reading. By contrast, the copied status term *thầy ấy* matches with the binder *thầy Nam* in the elided clause, hence a sloppy reading is allowed in (33b).

The analysis has a certain flexibility, in that the relevant contrasts are occasionally more subtle than would fit in a rigid feature-based system as in fn. 22. For instance, the pattern of (36) suggests a contrast between 'higher' and yet 'even higher':

¹⁸ We do not use an extrinsic marking in terms of features such as -H, H, +H, as in a previous version. Many thanks to an anonymous reviewer for inspiring comments. Note that variable typing, contrary to the use of indices, does not violate the inclusiveness constraint because typing for honorificity (or gender) does no more than reflecting intrinsic morphosyntactic properties of the expressions involved.

¹⁹ While the variable in the possessive is intrinsically marked for honorificity, the subject variable is just of type e , since it arises by QR. Hence also in case of a honorificity mismatch the subject of the elided clause can apply to the pasted λ -expression yielding a strict reading. Depending on one's theory of ellipsis (fn. 11) implementations may differ, but a discussion would lead us beyond the scope of this contribution.

- (36) Bà Mai thích con chó của bà ấy và chú Tân cũng vậy.
 KIN.GRM Mai like CL dog POSS KIN.GRM dem and KIN.UNC Tan also so
 ‘Mrs/Grandmother Mai_i likes her dog/the dog of grandmother, and uncle
 Tan does too.’

Here a strict reading is available, but a sloppy one is not. For this to follow, it is enough to assume a relevant difference in R_{k-hon} that is reflected in a different type. The same effect obtains in the case of pairs like e.g., *ông* ‘grandfather’ vs. *anh* ‘elder brother’ (both high) or *em* ‘younger sister/ brother’ vs. *con* ‘child’ (both low). Although *ông* ‘grandfather’ and *anh* ‘elder brother’ are both high on the honorificity scale, they are not fully equivalent in honorificity status, and in fact only allow strict readings. Similarly, this happens in pairing *em* ‘younger sister/brother’ with *con* ‘child’. The status of someone who is referred to as *em* is determined in the relation with the speaker/the hearer, which means *em* must be lower than the speaker/hearer in the hierarchy. Given these honorificity scale differences, for these elements only strict readings are available. In principle one type could correspond to a class of honorificity relations. This yields additional flexibility. In the next section we will discuss how this additional flexibility helps account for variation.

One might wonder whether the availability of sloppy readings could not be simply based on a lexical identity requirement, instead of a match in honorificity. This would not work, however. Consider the following pair with *anh Nam* ‘elder brother’ versus *chị Mai* ‘elder sister’, see (37).

- (37) [*Anh Nam*]_i chăm sóc khu vườn của [*anh ấy*]_i và [*chị Mai*]_j cũng vậy.
 KIN.ELD.BR Nam take.care.of garden POSS KIN.ELD.BR DEM and KIN.ELD.SI Mai also so
 ‘Nam takes care of his garden and Mai does too.’

There is regional variation in this case. Despite a gender contrast, in a 2025 survey (see the appendix for details) both a strict and a sloppy interpretation are available for speakers from the Northern and Southern regions. Doan (2022:84-5) reported sensitivity to a mismatch in gender, as was confirmed in the 2025 survey. In this respect, Vietnamese appears to be like English (and Dutch) in which a mismatch in gender also does not lead to the systematic unavailability (or dispreference) of sloppy readings for some speakers (cf. for early observations: Sag 1976:181, Kitagawa 1991:520-27; for more discussion based on experimental work confirming that, for English, there is not a clearcut picture, see Storbeck & Kaiser 2018, Hall 2021).²⁰ But it also argues against a lexical identity requirement, since *anh Nam* is resumed in the Poss phrase by *anh ấy* ‘elder brother’, but *chị Mai* ‘elder sister’ would require the lexically different *chị ấy* instead of *anh ấy* in an overt Poss phrase, and nevertheless allows a sloppy reading as we noted. In order to accommodate the fact that gender differences do not yield a mismatch, we assume that gender is not reflected in the type of the variable in relevant varieties of Vietnamese, just as in English or Dutch. By the same token, this example also shows that *anh Nam* and *chị Mai* are equivalent in honorificity.

²⁰ If there is a gender effect, an analysis could follow the same pattern as the analysis of the honorificity effect, with variable typing for gender.

Further support is provided by status terms, as in (38). Here, the resuming possessive *ông ấy* has no lexical overlap with its binder *Giáo sư Nam*, yet allows a sloppy reading:

- (38) [Giáo sư Nam]_i tự hào về thành tích của [ông ấy]_i và [sếp Hùng]_j
 STA.PROF Nam take pride in achievement POSS KIN.GRF DEM and STA.BOSS Hung
 cũng vậy.
 also so
 ‘Prof Nam took pride in his achievement and boss Hung did too.’

Both examples then show that it is not lexical identity that is required, but that a match in honorificity is both necessary and sufficient.²¹

8 A note on variation

The analysis provided above reflects the properties of the first author’s variety of Vietnamese, consistent with speakers from the middle region. It shows a clear contrast between honorificity features and gender features. In the interpretation process gender is not reflected in the typing of the variable, but honorificity is (unlike for instance in Dutch). This is testimony to the important status of honorificity in the Vietnamese system. However, subsequent testing with first year university students (see Appendix) showed that there seem to be speakers allowing a considerable relaxation of the matching requirement. A simple way to accommodate such relaxation is to assume that all honorificity expressions are equivalent for typing for these speakers, or that they have no typing at all. Consider, (39) for illustration.

- (39) Em Cường sửa chiếc ô tô của em ấy và anh
 KIN.YOU CL fix motor poss KIN.YOU dem and KIN.ELD.BR
 Nam cũng vậy.
 Nam also so.
 ‘Younger brother Cuong fixed his motor and elder brother Nam did so too.’

Here a sloppy reading was preferred but a strict reading was also possible, although the honorificity markers are different. One might think that relaxation reflects some form of relatedness between the terms. Although this may be the case for some speakers, the kinship relations involved may also be quite remote, as in (40):

²¹ Given the variation, it is not unexpected, then, that one of the reviewers observes that for him/her, and native speakers they consulted, sloppy readings are, more generally, not available with lexically distinct kinship terms. But, as shown by (37) and (38), this cannot be generally the case. Note that Kitagawa (1990) observed that person mismatch had an effect on the preferred reading, but that almost all English speakers accepted both strict and sloppy readings, which would not be compatible with a lexical identity requirement.

- (40) Cháu Mai đang vẽ mẹ của cháu và bác Trung cũng vậy.
 KIN.NIE Mai PROG draw mother POSS KIN.NIE and KIN.UNC Trung also so
 ‘The niece Mai is drawing her mother and so is uncle Trung.’

Again, both strict and sloppy readings are available. This shows that relatedness between the kinship terms involved is not a systematic condition on relaxation of the matching requirement.

When the grammar itself provides no restriction, one may find the effect of extra-grammatical factors. In (41), for instance, with the order of occurrence of *anh* and *em* reversed, one may observe a preference for sloppy. Such a preference, we hypothesize, may follow from the fact that it is culturally less accepted for a younger person to scold an older person’s child. In any case, the preference patterns show that the grammar leaves the options open.

- (41) [*Anh Nam*]_i mắng con của [*anh ấy*]_i và [*em Hùng*]_j cũng vậy
 KIN.ELD.BR Nam scold child POSS KIN.ELD.BR DEM and KIN.YOU Hung also so
 ‘Nam scolds his child and Hung does so.’

In the examples discussed we saw that despite a mismatch in honorificity between pairs like *ông* ‘grandfather’ – *cháu* ‘grandson’, *anh* ‘elder brother’ – *em* ‘younger brother/sister’, *bác* ‘uncle’ – *cháu* ‘niece/nephew’, to which we may add *dì* ‘aunt’ – *chú* ‘uncle’, for all these pairs we found subjects allowing sloppy interpretations. The fact that we found this relaxation on matching, suggests that the status of honorificity in Vietnamese is not stable. It could be the case that relaxation of honorificity is more general in a younger generation due to changes in social structure under the influence of globalization.²² Such a change would be intriguing. It would be important to investigate its prevalence and the factors underlying it in detail. This, however, will require a separate study.

9 Conclusions

In this contribution we investigated why kinship and status terms in Vietnamese can be bound, yielding both strict and sloppy identity readings in ellipsis contexts. We showed that, due to their relational character, kinship terms and status terms in Vietnamese have a potentially open position that allows them to be bound just like pronouns. Thus, like pronouns, they yield both bound variable and coreferential readings, producing both sloppy and strict readings under VP-ellipsis. However, in an interesting variety of Vietnamese this is subject to the requirement that the dependent term match the envisaged binder in honorificity. In our analysis this is effected by a restriction due to the type of the dependent variable. When there is a

²² Similar changes have taken place in Dutch and German, where the informal forms of address have been gaining considerable ground over the formal forms of address over the last decades. In Indonesia, as came up in a discussion at ICAL 14 (The 14th International Conference of Austronesian Linguistics at Madagascar), due to the changing social structure a language with a rich honorificity system like Javanese is under pressure by Bahasa Indonesia.

match in honorificity, both sloppy and strict readings are available, with possible preferences due to pragmatic effects. By contrast, when there is a mismatch in honorificity, no binding results, yielding strict readings only. No such matching requirement obtains in the case of a difference in gender. This is testimony to the important role of honorificity in the grammatical system of standard Vietnamese. However, there are also speakers for whom the matching requirement is relaxed. A proper perspective on the prevalence of this pattern will require further study.

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Author contributions All authors revised and rewrote the manuscript.

Data availability No datasets were generated or analysed during the current study.

Conflict of interest The authors declare no competing interests.

Appendix

The judgments in this paper reflect the first author's native speaker's judgments as systematically checked with a small number of colleagues. This was supplemented with surveys conducted by the first author, which we will briefly describe.

The first survey was based on interviews, conducted either face-to-face or by telephone/audiovisual means. 12 Vietnamese consultants participated, evenly distributed over the region in which they lived: Northern, Middle, or Southern. The age range was 28–39y, with one exception (age 68), resulting in a mean age of 36y. 7 consultants had a university education; all had 'white collar' jobs with a middle-class socio-economic status.

The consultants were offered sentences—all cases of VP-ellipsis—in a paper questionnaire. They were given three options to choose from: 'strict', 'sloppy', or both 'strict' and 'sloppy' readings. The interviewer explained the purpose of the questionnaire verbally beforehand. All examples used in the article scored 85% or higher on (non-)acceptance.

A similar survey from 2025 was slightly different in its setup. The paper questionnaire was given to consultants or sent to them via email/WhatsApp. There were 16 consultants, 5 from the Middle region, 6 from the Northern region and 5 from the Southern region. The age range was 28–76y, with a mean age of 47y. Three of the consultants had a university education, three were teachers, seven had

(higher) vocational training, and three had a white-collar job, leading, overall, to a middle-class socio-economic status.

There was a one-page introduction explaining the setup. There were two choices, ‘strict’ and ‘sloppy’, which allowed the consultants to choose more than one option. In some cases, other options—speaker interpretation or a contextual third person option—were offered. The questionnaire contained 32 sentences, 15 of which were (non-ellipsis) filler sentences containing different types of anaphoric dependencies and 17 were VP-ellipsis choices.

Out of 272 VP-ellipsis options (16 participants, 17 sentences), only 11 were marked as ambiguous by 7 persons. So, we concluded that a 100% ‘strict’/‘sloppy’ score could be interpreted as the only possible interpretation, but in the case where 85% (or less) chose one reading and 15% (or more) chose the other reading, we interpreted that the sentence basically allowed both readings, with the percentages showing the preferred interpretations, not the possible interpretations.

In 2024, an online Google form survey was conducted in which 24 first-year students, majoring in Vietnamese literature, participated. The options offered were ‘sloppy’, ‘strict’ and ‘both’. All options were used. The students were primarily from the Middle region of Vietnam, but there were participants from the North and the South as well. Their age was between 20 and 25. We did not use response validation (response engagement) options, which made the results not fully reliable but sufficiently informative to warrant being mentioned.

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