Supersloppy readings:

Indexicals as bound descriptions

Isabelle Charnavel (Harvard University)

Abstract

This article explores understudied dependent readings in (English) ellipsis and focus constructions and their theoretical consequences. The main focus is on "supersloppy" readings of person indexicals in VP-ellipsis, in which *you* can be bound by *I* and vice versa. The empirical properties of these cases, tested in a large-scale systematically controlled questionnaire, show that *I* and *you* can be construed as e-type pronouns dependent on each other. This challenges the Kaplanian fixity theory of indexicals in a new way: not only can first- and second-person pronouns be bound, they can also contribute descriptive meanings that affect the interpretation of (elided) sentences. Readings similar to supersloppy readings furthermore extend to time and location indexicals, demonstratives and proper names, which indicates the linguistic relevance of other relations between indexicals and between non-indexicals. All these types of dependent readings shed new light on the theories of indexicals, demonstratives and proper names as well as e-type pronouns.

Introduction

Kaplan (1977/1989) dubbed words like *I* and *you* as 'indexicals' (inspired by Pierce) because they are indicative: the descriptive meaning of indexicals (*I* basically means "the speaker of the utterance" and *you* "the addressee of the utterance") does not affect the propositional content of sentences, but is directly used to fix their referents. Under the Kaplanian theory, this follows from the fact that the semantic value of *I* and *you* is insensitive to world and time parameters, and is determined by the context rather than by an assignment function. The context dependency of indexicals furthermore explains their fixity: given that they are only relativized to a context parameter, which cannot be manipulated by any logical operator (in Kaplanian terms, there is no "monster"), the semantic value of indexicals cannot be affected by any operator but remains fixed solely by the context of the actual speech act.

    The Kaplanian theory has been challenged on two main grounds. First, the discovery of indexical shifting in some languages like Amharic or Zazaki (see Schlenker

2003, Anand 2006, i.a.) has questioned the absence of monsters: the fact that some indexicals may be evaluated with respect to the context of a reported speech act shows that the context dependency of indexicals may not imply their fixity. Second, the observation that some indexicals can behave as bound variables in ellipsis and focus constructions (see Partee 1989, Heim 1991a, i.a.) suggests that some indexicals may be dependent on the assignment function rather than (solely) on the context parameter. The Kaplanian fixity theory of indexicals[1] is thus too strong.

The main goal of this paper is to examine understudied data that not only confirm this conclusion, but also challenge the Kaplanian approach in a new way: even if indexicals are insensitive to time and world parameters and can only depend on the (actual) context, their descriptive content can affect the interpretation of sentences under certain circumstances.[2] As already independently observed in Rebuschi (1994, 1997), Bevington (1998) and Chung (2000), Juliet's answer to Romeo in (1) does not have to be a joke (i.e. *I love myself too*), but can be interpreted as a declaration of love in return (i.e. *I love you too*).

(1) a. *Romeo to Juliet*: "I love you."
   b. *Juliet to Romeo*: "I do too."

As we will see, this is neither predicted by theories of VP-ellipsis nor by theories of indexicals. But the puzzle is solved, I will argue, if *you* in (1) can be substituted with the descriptive meaning in (2), which crucially introduces a dependency between *I* and *you* by defining *you* in relation to *I*.

(2) a. I love *my interlocutor*.
   b. I do too (love *my interlocutor*).

This shows that in spite of their intensional insensitivity and their context dependency, indexicals can have synonyms (e.g. *you* is *the addressee of the present utterance* or *my interlocutor)* and introduce a descriptive meaning that is crucially relevant to the interpretation of (elided) sentences, because they can be defined in relation to each other.

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[1] For convenience, I will keep referring to first and second person pronouns as (person) indexicals throughout the paper even if I will not adopt an indexical analysis *à la* Kaplan, but a variable analysis of these pronouns (with indexical presuppositions).
[2] The cases I will discuss are different from Nunberg's 1993 cases, to which I return in section 3.6.

This also confirms, as we will see, that indexicals can exhibit bound variable readings, which requires relaxing the fixity thesis of indexicals.

This descriptive potential of indexicals only reveals itself in elided constructions because ellipsis can make relevant the level at which indexicals are represented as descriptions dependent on each other. This holds more generally as illustrated in (3): if the pragmatic conditions allow it (i.e. in (3) if the audience is familiar with the story of Romeo and Juliet), proper names can also be interpreted as bound descriptions to a certain extent, which challenges Kripke's (1972) treatment of proper names as rigid designators.

(3) a. "Romeo loves Juliet."
   b. "Juliet does too." (love Romeo, i.e. her partner).

In this paper, I will primarily focus on dependent readings of indexicals because the new challenge they present to the Kaplanian approach has important consequences on the theory of indexicals. I will only sketch how similar readings with proper names could also shed further light on the understanding of proper names; a full exploration is beyond the scope of this paper. This is partly due to the fact that the subtlety of judgments about dependent readings requires a careful and detailed empirical investigation. Consequently, the whole discussion will be based on judgments obtained by a large-scale, systematically controlled questionnaire.

The article is organized as follows. In section 1, I describe the central data points of the paper, which remain unexplained under current theories, and I lay out the core of my proposal, which makes use of two independently existing ingredients (indexical binding and e-type construal). In section 2, I present the theoretical merits and flaws of the few previous proposals, and explain how the empirical questions they raise warrant an experimental study. On the basis of this study, I specify in section 3 my proposal about dependent readings of person indexicals in VP-ellipsis: the experimental results reveal crucial properties of the readings under investigation (esp. purely indexical dependency), which challenge the Kaplanian theory in a new way. In section 4, I discuss to which extent such dependent readings extend to other indexicals, to proper names and to focus constructions.

1. The core claim

1.1. The main fact: supersloppy readings

Consider example (1) again repeated below in (4) and its reversal in (5). The central empirical focus of this paper is the fact that (4)b (*I do too*) and (5)b (*do you?*) can be interpreted as in (i) (*I love you too* and *do you love me*, respectively). I will henceforth call this reading "supersloppy".

(4) a. *(Romeo to Juliet)* "I love you".
    b. *(Juliet to Romeo)* "I do too".
i. Juliet means: "I love you too".   [Juliet loves Romeo]   *(supersloppy reading)*
ii. Juliet means: "I love me/myself too".   [Juliet loves Juliet]   *(strict reading)*

(5) a. *(Romeo to Juliet)* "Do you love me?"
    b. *(Juliet to Romeo)* "Do you?"
i. Juliet means: "do you love me?"   [does Romeo love Juliet?]   *(supersloppy)*
ii. Juliet means: "do you love yourself?"   [does Romeo love Romeo?]   *(strict)*

Supersloppy readings resemble sloppy readings available in VP-ellipsis contexts such as (6) (Ross 1967, Sag 1976, Williams 1977, Fiengo & May 1994, i.a.).

(6) Julie loves her mother. Liz does too.
    i. Liz loves her own mother too.   *(sloppy)*
    ii. Liz loves Julie's mother too.   *(strict)*

As is well known, the elided pronoun in (6) can be interpreted in two ways. Under the strict reading in (ii), it refers to the same individual in the ellipsis site and in the antecedent (namely, to Julie). This interpretation derives from a referential representation of *her* in the antecedent: the identity conditions on ellipsis guarantee that the elided VP contains the same free occurrence of the pronoun. Under the sloppy reading in (i), the elided pronoun does not refer to Julie in the ellipsis site, but to Liz. This interpretation relies on the bound construal of *her* in the antecedent: due to binding parallelism (Fox 2000, i.a.), the elided pronoun is bound by Liz. Under this reading, the elided VP is therefore not strictly, but only sloppily identical to the antecedent VP.

As already observed by Sag & Hankamer (1984), among others, the strict reading is also available in examples like (4): the elided pronoun can refer to the same individual as its antecedent, namely to Juliet in (4)ii. Furthermore, examples like (4) exhibit the

dependent reading in (i), under which the reference of the elided pronoun depends on the subject of the elided VP *I*: the elided pronoun in (4) can refer to Juliet (the speaker)'s addressee, namely Romeo.

Under existing theories, this interpretation, unlike sloppy readings like (6)i, cannot derive from the bound construal of the antecedent pronoun *you*. That's why the identity between the elided VP and its antecedent is even sloppier than usual here. On the Kaplanian view of indexical pronouns, binding of the antecedent pronoun *you* is impossible because *you* has a fixed reference: the semantic value of *you* is determined by the context of the actual speech act rather than by an assignment function, and the context parameter cannot be manipulated. It is nevertheless well known that this theory is too strong: indexicals can be interpreted as bound variables under certain circumstances as in (7) (from Partee 1989) or (8) (from Heim 1991a) below.

(7) I am the only one around here who will admit that I could be wrong.
     i. [Nobody else around]$_i$ will admit that they$_i$ could be wrong.   *(sloppy)*
     ii. Nobody else around will admit that I could be wrong.   *(strict)*

(8) a. Only I did my homework.
     i. [Nobody else]$_i$ did their$_i$ homework.   *(sloppy)*
     ii. Nobody else did my homework.   *(strict)*
  b. I did my homework, but my classmates didn't.
     i. [My classmates]$_i$ didn't do their$_i$ homework.   *(sloppy)*
     ii. My classmates didn't do my homework.   *(strict)*

Such cases of indexical binding however require featural identity between the binder and the bindee (i.e. first-person feature in (7)-(8)); as we will discuss in section 2, this is reflected in the various analyses of this phenomenon. Due to person mismatch, the antecedent pronoun *you* in (4) cannot therefore be bound by *I* under any existing theory of indexicals.

Supersloppy readings are not expected under any theory of ellipsis either, even if the nature of the identity condition on ellipsis remains under debate.[3] In particular, it is

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[3] Or at least, supersloppy readings are not expected under any theory of ellipsis that argues for identity conditions in ellipsis. They may be less unexpected under theories like Hardt (1993), according to which ellipsis is like a free variable that picks up a contextually salient property. But under such theories, it would be very difficult to predict all the structural-dependent contrasts observed in supersloppy readings (as will be described in section 3).

well-known that the identity conditions on ellipsis cannot be reduced to strict isomorphism, as several apparent types of mismatch have been documented between the antecedent and the ellipsis site (e.g. vehicle change, tense or modality mismatches; see Johnson 2001, Merchant 2001, i.a.). But the type of mismatch that would be required for giving rise to supersloppy readings is unattested: the reference of a verbal argument can be different in the antecedent and in the ellipsis site only under binding parallelism as in standard cases of sloppy readings reviewed above. Conversely, assuming strict phonological identity conditions could derive examples like (4), but would otherwise overgenerate as we will see in section 3.2. We will therefore hypothesize that the key to understanding supersloppy readings does not lie in the theory of ellipsis, but in the theory of indexicals, and in the rest of the paper, we will simply assume LF identity conditions on ellipsis in the spirit of Merchant (2001), i.a., where the identity condition is regulated by focus conditions.

1.2. The analysis in a nutshell

The main idea of the analysis is to reduce supersloppy readings to regular sloppy readings by taking advantage of the known fact that indexicals can be bound, as observed above, and by construing a possible meaning such indexicals can have as including a bindable variable, as I now explain.

To handle (4), we need to achieve a binding dependency between *I* and *you* in spite of the feature mismatch. Our solution is inspired by one to a similar problem arising in so-called donkey sentences like (9) (originally from Geach 1962 and Evans 1977) or paycheck sentences like (10) (which is Jacobson's 1991 edition of Karttunen's 1969 classic example).

(9) Every man who owns a donkey beats it.

(10) A woman who puts her paycheck in a federally insured bank is wiser than one who puts it in the Brown Employees' Credit Union.

In (9), the inanimate pronoun *it* covaries with *a donkey* even if the only quantifier that is in a position to bind it (i.e. *every man who owns a donkey*) does not match it (in animacy, i.a.). Similarly, the pronoun *it* in (10) cannot be referential and does not have any potential binder high enough in the structure.

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In the standard literature, there are two types of solution to this problem. One (Karttunen 1969, Jacobson 1977, Heim 1990, Elbourne 2001, i.a.) is to assume some sort of ellipsis: depending on the analyses, the pronoun *it* basically stands for *his donkey* or *the donkey* in (9) and for *her paycheck* or *the paycheck* in (10). The second one (Cooper 1979, Engdahl 1986, Heim & Kratzer 1998, i.a.), which I will henceforth adopt in this paper under the name "e-type analysis",[4] is to hypothesize that the LF representation of these so-called e-type pronouns[5] consists of a definite article and a predicate that is made up of two variables, one of type $<e,et>$ that remains free and another one of type e that gets bound in the sentence. As shown in (11), the pronoun *it* in (9) can thus be considered as an e-type pronoun containing a free relational variable R denoting the contextually defined relation that holds between men and donkeys they own ($\lambda x.\lambda y.y$ *is a donkey that x owns*) and the variable pro_1 (argument of R) bound by *every man who owns a donkey*.

(11)   a. [Every man who owns a donkey]$_1$ beats <u>it</u>, i.e. *the donkey that he$_1$ owns*.
        b. [[it]] ^{c,w,g} = the R_7 pro_1

The key of my proposal is to hypothesize that similarly, an indexical can be construed as an e-type pronoun that makes binding by another indexical available.[6] Under the right pragmatic conditions, *you* can include a free relational variable denoting the relation between the two discourse participants ($\lambda x.\lambda y.y$ *is an interlocutor of x*) and an individual variable that gets bound by *I* as shown in (12). *Me* can similarly be interpreted as *your interlocutor* as shown in (13) if the relation between the two discourse participants is salient and relevant enough in the discourse.

(12)   a. I$_1$ love <u>you</u>, i.e. *my$_1$ interlocutor*.
        b. [[you]] ^{c,w,g} = the R_5 pro_1

(13)   a. Do you$_1$ love <u>me</u>, i.e. *your$_1$ interlocutor*?
        b. [[me]] ^{c,w,g} = the R_5 pro_1

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[4] I here adopt Heim's 1990 terminology, but note that I do not aim to take a stand on the range of examples that can be captured by this type of analysis. In particular, I will here ignore the uniqueness controversy associated with donkey examples (see Heim 1990, i.a., for discussion) as it is irrelevant to my purposes.
[5] This terminology is loosely adapted from Evans (1977). Originally, Evans (1977) contrasted e-type (referential) pronouns with bound pronouns. The class of pronouns that has come to be identified as e-type pronouns only corresponds to one specific case of these originally e-type pronouns.
[6] We will see in section 3 (see esp. section 3.2) why the e-type construal of indexicals requires binding, which implies that it cannot be used for all instances of indexicals.

This e-type construal of indexicals directly gives rise to supersloppy readings in (4)-(5)i as long as the e-type pronoun is copied into the ellipsis site and binding parallelism obtains, as (roughly) represented in (14)-(15).

(14) a. I love you. ($\approx$ I_i love my_i interlocutor)
    b. I_k do too. (love my_k interlocutor)

(15) a. Do you love me? ($\approx$ Do you_i love $your_i$ interlocutor?)
    b. Do you_k? (love $your_k$ interlocutor)

      This analysis[7] relies on the null hypothesis that just like other pronouns, indexicals have e-type readings. But it has been observed (by Jacobson 2012, i.a.) that singular indexicals resist regular e-type construals. For instance, *me* cannot be interpreted as *his spouse* in (16) (Jacobson 2012: 34).

(16) *This year everyone was supposed to bring their spouse, but only MICHAEL brought <u>me</u>.

It thus remains to be explained why the free relational variable used for e-type readings of *you* and *me* should exclusively denote the *interlocutor* relation between the two discourse participants. Why can't it be set to any other contextually salient function such as the *spouse* relation in (16)?[8]

This derives, I suggest, from the indexicality of these pronouns. Parsimony implies that the surface features of indexicals should impose the same constraints on these pronouns under their regular reading and under their e-type reading. In fact, the gender feature of the pronoun *her* constrains its reference in the same way under its e-type reading in (17) (Jacobson 2000: 136) as under its regular reading (as discussed in Jacobson 2000, i.a.).

(17)   John loves his mother. Bill hates her (i.e. his own mother).

Concentrating on person features,[9] this entails that just like under their regular interpretation, *you* and *me* must be indexical under their e-type interpretation and refer to

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[7] The examples presented so far could suggest an alternative analysis involving neither binding nor e-type interpretation, but character copy into the ellipsis site. This alternative will be considered and dismissed on empirical grounds in section 3.2.

[8] This issue differs from the overgeneration issue known as the problem of the 'formal link' (see Heim 1990, i.a.). In (16), the presence of the noun *spouse* should indeed make the function *spouse* easily available.

[9] For simplicity and space reasons, I ignore number features throughout the article (see Sauerland 2003, Rullmann 2004, Heim 2008b, Sudo 2012, i.a.). See discussion about an issue they may raise at the end of section 3.3.

the addressee and the speaker, respectively, of the context. As we will see in section 3, which further details and formalizes the analysis, this constraint can be implemented using presuppositions.

Now, it has been observed since at least Kaplan (1977/1989) that indexicals, unlike definite descriptions, are exclusively context-dependent: they cannot be relativized to world and time parameters (see Schlenker 2018, i.a., for a review). That's why, for example, (18)a cannot be interpreted as (18)b where *the speaker* is interpreted in the scope of *always*.

(18) a. I am always right.
      b. The speaker is always right.

As will be detailed in section 3.3, this constraint, I hypothesize, is responsible for restricting the value of the free relational variable used for e-type readings of *you* and *me*. Given that indexicals must exclusively be context-dependent, the function used for their e-type interpretation must also be exclusively context-dependent. In particular, this entails that both the domain and the range of the function must only be relativized to the context, not to world and time parameters. In consequence, only a relation between indexicals can qualify, and the *interlocutor* relation ends up being the only possible value for the free relational variable used for the e-type reading of *you* and *me* (if the pragmatic conditions make it sufficiently salient, as we will see in section 3.4). The e-type construal of *me* and *you* thus relies on their specific dependency (already observed in Benveniste 1946/1966), which allows them to remain intensionally insensitive and exclusively dependent on the context under their e-type interpretation.

The analysis of supersloppy readings proposed in this paper thus uses two ingredients already existing for other independently observed phenomena – bound indexicals and e-type pronouns – and their combination explains why supersloppy readings are so restricted.

This hypothesis, as well as the empirical scope of the phenomenon, need to be further specified. This will be the goal of section 3, where I will present the details of my analysis based on the results of an experimental study. Before that (in section 2), I will examine previous analyses of sloppy and supersloppy readings of indexicals and explain how they relate to the present proposal, not only analytically, but also empirically; in

particular, the empirical questions they raise justified running a systematically controlled questionnaire, which is also presented in section 2. Readers only interested in the results and the finalized analysis can directly go to section 3.

2. Previous studies on (super)sloppy readings of indexicals
2.1. Previous analyses of bound indexicals (sloppy readings)

As mentioned above, our analysis of supersloppy readings takes advantage of the fact that indexicals can be bound. A brief review of previous analyses of bound indexicals is therefore relevant to specifying this ingredient of the proposal.

Examples like (7)-(8) or (19) below have received a lot of attention (Heim 1991a, 2008a-b, Kratzer 1998, 2009, von Stechow 2003, Rullmann 2004, Cable 2005, Jacobson 2012, Sudo 2012, Sauerland 2013, i.a.) in part because they challenge the fixed reference theory of indexicals: the availability of sloppy readings shows that first- and second-person pronouns cannot just be constants directly referring to the speaker s and the addressee a, respectively, of the context c, as formalized in (20).

(19) a. Only you eat what you cook.   *Kratzer 2009*
      i. [Nobody else]$_i$ eats what they$_i$ cook.   *(sloppy)*
      ii. Nobody else eats what you cook.   *(strict)*
   b. You eat what you cook, but your classmates don't.
      i. [Your classmates]$_i$ don't eat what they$_i$ cook.   *(sloppy)*
      ii. Your classmates don't eat what you cook.   *(strict)*

(20) a. [[me]]^{c,w,g} = s$_c$
    b. [[you]]^{c,w,g} = a$_c$

Several solutions have been proposed to this problem. One family of proposals converges on abandoning the Kaplanian claim that the semantic value of indexicals is always determined by the context rather than by an assignment function. Instead, they reduce first- and second-person bound pronouns to variables interpreted via the assignment function g, just like third-person pronouns. Specifically, person features are treated as

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presuppositional triggers as shown in (21)[10] (Heim & Kratzer 1998, Schlenker 2003, Heim 2008a-b, i.a.), just like number or gender features (see Cooper 1983, i.a.).

(21) a. $[\![\,me_i\,]\!]^{\,c,w,g} = g(i)$; presupposition: $g(i) = s_c$
  b. $[\![\,you_i\,]\!]^{\,c,w,g} = g(i)$; presupposition: $g(i) = a_c$

This move is however insufficient to derive sloppy readings of indexicals: given that the focus alternatives (e.g. in (19)a) and the ellipsis site (e.g. in (19)b) can involve non-discourse participants, it remains to explain how the person features of the bound pronoun can be disregarded at the relevant level of interpretation in focus and ellipsis constructions. This family of proposals diverges on this second move. One approach (Heim 2008a, Sauerland 2013, i.a.; cf. Jacobson 2012 in a variable-free framework) attributes this possibility to the specificity of focus constructions. They argue that the presuppositional meaning of indexicals does not have to be satisfied in focus alternatives: focus values are blind to the presuppositional content of *phi*-features.[11] According to the second main approach[12] (the minimal pronoun approach in Kratzer 1998, Heim 2008b, Kratzer 2009, i.a.; cf. von Stechow 2003 for an alternative formulation[13]), the person features of bound indexicals are not interpreted because they are absent at LF: bound indexicals are born as mere indices (as 'minimal pronouns') and inherit their person features from their binders at PF via feature transmission (in case of local binding). Note that on this second view, bound indexicals do not really challenge the Kaplanian approach as they are in fact "fake indexicals" and thus belong to a different, new category of pronouns.

The second family of proposals (Cable 2005, Kratzer 2009 for long distance binding of indexicals) challenges a different aspect of the Kaplanian theory: instead of equating indexicals to variables dependent on the assignment function, they introduce a "monstrous" species of binding – context binding. As represented in (22) (from Kratzer

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[10] As I do not want to take a stand on the treatment of presuppositions in this paper, I choose not to use a technical notation of presuppositions (e.g. qua definedness conditions) throughout.

[11] This explanation applies to both *only*-constructions and ellipsis constructions because the identity conditions on ellipsis are subject to focus conditions (Rooth 1992, Heim 1997, Merchant 2001, i.a.).

[12] A third variant has been explored by Sudo (2012) and Minor (2013), according to which the person information is encoded in the system of semantic binding: indices are not just numbers (with type information), but always carry the person information.

[13] Von Stechow's (2003) idea is in some sense the opposite of the minimal pronoun approach. Instead of assuming feature transmission, he proposes feature deletion: bound first and second person pronouns are born as such, but become minimal pronouns at LF where they are interpreted.

2009, inspired by Cable 2005), regular abstraction operators manipulate the values of numerical indices by shifting variable assignments; the new indexical abstraction operators manipulate the values of first- and second-person pronouns by shifting the context parameter c. By introducing indexical abstraction, Cable (2005) thus extends context shifting from attitude contexts (which is motivated, as mentioned above, by the availability of shifted indexicals in attitude contexts in some languages like Amharic or Zazaki, see Schlenker 2003, Anand 2006, i.a.) to focus and ellipsis constructions.[14]

(22) a. *Regular λ-abstraction*
   $[[\lambda \, [n] \, \alpha]]^{g,c} = \lambda x \, [[\alpha]]^{g',c}$, where g′ is like g, except possibly that g′([n]) = x
   b. *Indexical λ-abstraction*
   $[[\lambda \, [1st] \, \alpha]]^{g,c} = \lambda x \, [[\alpha]]^{g,c'}$, where c′ is like c, except possibly that speaker(c′) = x
   $[[\lambda \, [2nd] \, \alpha]]^{g,c} = \lambda x \, [[\alpha]]^{g,c'}$, where c′ is like c, except possibly that addressee(c′)=x

   As they stand, none of these proposals can capture supersloppy readings, as they require the binder and the bindee to share their person features at some level of representation: *me* can only be bound by a first-person pronoun, and *you* by a second-person pronoun. These analyses cannot directly account for bound readings of one indexical by a different indexical.

   But these approaches provide us with analytical tools for deriving indexical binding, which is required under our e-type analysis of supersloppy readings, under which the indexical must contain a bound variable. I will here choose to adopt the presuppositional account of person indexicals as defended by Heim (2008a) or Sauerland (2013). This choice is mainly guided by parsimony (see further arguments in section 3.6): unlike the minimal pronoun approach, this account does not introduce a fundamental difference between free and bound indexicals despite their morphological identity (they have the same lexical entry); unlike the monstrous approach, this account does not introduce a new mechanism, which runs the risk of overgenerating (see some discussion about this in section 4.3). This account instead parsimoniously derives the specificity of bound indexicals from the specificity of the constructions they can appear in (i.e. constructions involving focus).

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[14] Both Schlenker (2003: 55) and Anand (2006: 95), however, explicitly mention that only quantification over individuals, not over contexts, is needed in focus constructions.

These analyses also raise two empirical questions regarding supersloppy readings. First, can the ellipsis site also contain non-discourse participants in supersloppy readings, which could also warrant for supersloppy readings the second move made to explain sloppy readings of indexicals (i.e. focus blindness to presuppositional person features)? As we will see in section 3, the results of the experimental study will show that the answer to this question is negative; but as we will discuss in section 3.5, this does not necessarily imply a difference between sloppy and supersloppy readings of indexicals with respect to focus blindness to presuppositional person features. Second, do supersloppy readings also arise in constructions involving focus sensitive particles like *only*? As we will see in section 4.3, the answer to this question is mixed: the experimental results show that readings similar to supersloppy ones do arise in focus constructions, but they do not obey the same constraints; this will justify a different analysis of these readings (complex focus analysis instead of e-type analysis).

2.2. Previous analyses of supersloppy readings

The few existing analyses of supersloppy readings (Rebuschi 1994, 1997, Bevington 1998, Chung 2000) do not relate them to the sloppy readings of indexicals reviewed above. But they provide some ideas similar to the second aspect of our analysis (the e-type construal), even if they do not explicitly draw the parallel with e-type analyses. Despite their flaws and imprecisions reviewed below, they will thus allow us in part to refine both theoretical and empirical aspects of our analysis.

2.2.1. Rebuschi (1994, 1997) and Chung (2000)

The main idea of the first group of studies (Rebuschi 1994, 1997, Chung 2000) is indeed to treat supersloppy readings as functional readings, where *I* and *you* stand in a reciprocal relation to each other.

Rebuschi (1994, 1997) observes the existence of supersloppy readings – or "quirky dependence", in his words – primarily in French (he denies their existence in Germanic languages) and relates them to the reciprocal *each other*. He does so for empirical reasons: according to him, *I* and *you*, just like *each other*, are subject to Condition A of the Binding Theory; he claims that the supersloppy reading is mandatory (thus blocking the strict

reading) when one of the two person indexicals is locally c-commanded by the other, but is unavailable otherwise. This leads him to adapt Heim, Lasnik & May's (1991) analysis of *each other* to quirky dependence. Specifically, he proposes that when two person indexicals α (*EGO* or *TU*)[15] and β (*TU* or *EGO*) are related by local c-command, β must be interpreted as the two-place function ALTER of α and the pair NOS = (Speaker, Hearer). In other words, *you* is interpreted as the individual other than *me*, and *me* as the individual other than *you*, in the pair consisting of *you* and *me.*

To account for locality restrictions, Rebuschi further assumes that NOS must adjoin to α by movement, once β has been rewritten as ALTER (α, *NOS*) as shown in (23). The idea is to mimic what Heim, Lasnik & May (1991) postulate for *each other* where *each* in *each other* moves to its antecedent, a movement subject to locality conditions.

(23) a. [A to B] Je t'ai vu.　'I saw you'　　　　　　　　　　*Rebuschi 1997: (35)*
　　 b. → *EGO* [saw *TU*]
　　 c. → *EGO* [saw ALTER(*EGO*, *NOS*)]
　　 d. → *EGO+NOS* [saw ALTER(*EGO*, *NOS*)]

The elided constituent is thus interpreted as the property P specified in (24), obtained from lambda abstracting over the subject *EGO* and its bindee ALTER (α, *NOS*) and where x ranges over NOS. This gives rise to the observed supersloppy reading: *I did too* as an answer to (23)a is understood as *I saw you too.*

(24) a. P = λx [x [saw ALTER(x)]]　　　　　　　　　　　　　*Rebuschi 1997: (36)*
　　 b. P = λx [saw (x, ALTER(x)]]

If the general idea behind the proposal is appealing, the exact mechanics and motivation of this analysis remain unclear. The main issue concerns the hypothesis of NOS-movement (cogently criticized in detail in Bevington 1998: 182-198), which is ad hoc and problematic, while it is crucial in the analysis to explain the main reported constraints on quirky dependence, namely its locality and restriction to indexicals (in both the antecedent and the elided sentence). In Heim, Lasnik & May's (1991) analysis, *each* moves to the antecedent, which corresponds to its range, to quantify over it. In the case of quirky dependence, however, this motivation for the movement is lost: NOS itself corresponds to

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[15] Rebuschi (1994, 1997) uses the Latin words to encode *I* ('ego'), *you* ('tu'), *other* (out of two) ('alter') and *us* ('nos').

the range (which incidentally makes its syntactic representation a bit unexpected) and is therefore non-quantificational. Why then can (and should) NOS undergo A-bar movement and adjoin to the subject? Also, it is unclear how the adjunction would lead to the interpretation of the head element as belonging to the pair of the adjoined element. Furthermore, NOS-movement predicts that supersloppy readings are subject to island violations such as the coordinate structure constraint, but this prediction is not discussed and the acceptability of examples like (25) below (which obtained an average grammaticality score of 5.24 out of 6 in my questionnaire discussed in the next section) show that this is not borne out.

(25) *Chris is talking to his children Lucy and Mary (who live in London and in Venice, respectively) via Skype.*
    a. *(Chris to Lucy)* "Now I can see you and Mary."
    b. *(Lucy to Chris)* "I can, too."
       Intended interpretation: I can see you and Mary, too (=Lucy can see Chris and Mary).

Moreover, to explain the absence of strict readings that he (incorrectly, see section 3.4) observes, Rebuschi assumes that the functional reading of an indexical is obligatory if the indexical is locally c-commanded by another indexical. Not only is this assumption stipulated, but also, it does not in fact guarantee obligatory supersloppy reading: it is unclear how NOS-movement could block the referential interpretation of the rewritten indexical to be copied into the ellipsis site, which would derive a strict reading. Finally, Rebuschi leaves implicit several important issues such as the intensional insensitivity that should be required for ALTER and the consequences of supersloppy readings for the theory of indexicals.

      On the empirical side, Rebuschi makes three claims that led me to construct the online questionnaire described in the next section in order to test them: according to him, supersloppy readings are not attested in Germanic languages (which he tentatively explains by a lexical restriction), strict readings do not co-occur with supersloppy readings in the simple cases mentioned above, and supersloppy readings are subject to locality conditions. As we will see in section 3, the results of the questionnaire show that only the last claim turns out to be partly correct.

      The functional aspect of Rebuschi's analysis is also found in Chung's (2000)

account: in her succinct note, Chung suggests that it is the "salient other" relation (similar to that found in *each other*) that can form the basis for a referential dependency involving two indexicals.

Chung's proposal is too suggestive to be evaluated, but it raises two empirical questions worth addressing in the online study. First, Chung notices (attributing this remark to Jim McCloskey) that (simple English cases of) supersloppy readings preferably arise in situations of conflict or negotiation that bring the "salient other" relation to the fore. Second, she claims that under similar pragmatic conditions, non-indexical DPs like proper names can also exhibit dependent readings with respect to indexical or non-indexical DPs. As we will see in sections 3 and 4, the contextual conditions indeed play a role in licensing supersloppy readings with two indexicals or two non-indexicals, but a mixture of the two types is not licensed.

2.2.2. Bevington (1998)

Bevington (1998) takes a different road to account for supersloppy readings (in English) – or "switch readings" in her words. This is partly due to the fact that she makes different empirical observations. Unlike Rebuschi (1994, 1997), she claims that switch is not subject to locality conditions: c-command and clausemateness are unnecessary for supersloppy readings.

Instead of relating *I* and *you* to reciprocal anaphors, Bevington therefore attributes to indexicals a new property called orientation (intended to replace Kaplan's notion of character), which she characterizes as a syntactic property. According to her, orientation is indeed a function ω operating at LF, which adds another step in the interpretation of first- and second-person pronouns: while third-person pronouns are directly born with numerical indices (which derive their denotation via an assignment function), indexicals are born as oriented expressions. As illustrated in (26)a, first-person pronouns have an "inward" orientation (noted by a left arrow) and second-person pronouns have an "outward" orientation (noted by a right arrow), while third-person DPs do not have any orientation. The function ω takes the orientation and returns a numeric index for indexicals (which then derives their denotation via an assignment function, just like in the case of third-person pronouns). As shown in (26), every sentence containing an indexical has thus two

representations, a structural one containing orientation (line 1), which is related derivationally to a numerically indexed structure (line 2).

(26) I love you. *Bevington 1998: chapter 2*
    a- Line 1: I← love you→ *syntax: from orientation to index (function ω)*
    b- Line 2: I_5 love you_8 *semantics: from index to individual (assignment function)*

Equipped with this new apparatus, Bevington (1998) derives switch readings by assuming that the identity conditions on ellipsis can include identity of orientation pattern (but do not have to, as in the case of strict readings). This is shown in (27), which conflates line 1 and line 2 and adopts the notation of Fiengo & May's (1994) dependency theory of VP-ellipsis.

(27) a. Speaker 1: $\overleftarrow{I}_{1\alpha}$ love $\overrightarrow{you}_{2\beta}$ *Bevington 1998: (70)*
    b. Speaker 2: $\overleftarrow{I}_{2\alpha}$ [love $\overrightarrow{you}_{1\beta}$], too.

Bevington's (1998) analysis, despite its intuitive appeal and attention to details, is not satisfactory. The main issue is one of parsimony: she proposes a new device (orientation) to account for a new phenomenon. Moreover, she has to stipulate that dependencies can only occur among oriented noun phrases or among noun phrases of the same numeric value (i.e. there is no mixed dependency) to account for the (correct) fact that supersloppy readings only arise in the presence of two indexicals.

Furthermore, Bevington's empirical observations are partly, but fatally incorrect, as the results of the questionnaire will reveal in section 3. In particular, supersloppy readings are in fact subject to c-command conditions. This further undermines her analysis, which is not intended to and not able to capture binding restrictions.[16]

2.3. Testing the data

The review of previous analyses shows that the facts concerning supersloppy readings are controversial. I have therefore tested the existence of these readings in English and their main properties using a large-scale online questionnaire in order to base my argumentation
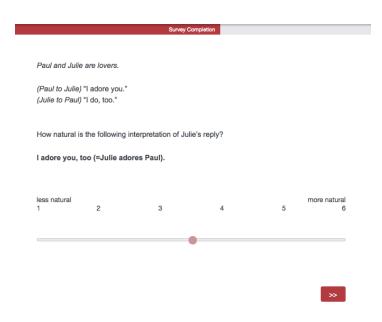
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[16] On the contrary, the incorrect empirical observations of Rebuschi (1994, 1997) (i.e. absence of strict readings, absence of supersloppy readings in English) are not fatal to his analysis, because his analysis does not in fact derive them, as explained above.

on the quantitative data thus collected. I now describe the method and materials of this experimental study (the full set of stimuli is included in the appendix).

A total of 536 native speakers of English (recruited on Mechanical Turk) were asked to rate the availability of supersloppy and strict readings online in 378 randomly ordered sentence items based on a 6-point continuous scale. The sentences (presented on Qualtrics) were divided into multiple lists so that each participant only had to judge 38 sentences and was asked, for each of them, to only judge one of the two readings (strict or supersloppy); therefore, no participant saw the same token twice.
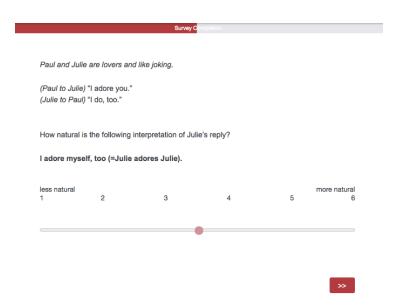
Each target sentence was inserted in a short dialog and introduced by a small context intended to make the target reading (supersloppy or strict) pragmatically plausible. The target interpretation was then made explicit and participants were asked about its naturalness as illustrated in (28)a-b (recall that no participant saw both (a) and (b)).[17]

(28)　a.

Survey Completion

Paul and Julie are lovers.

(Paul to Julie) "I adore you."
(Julie to Paul) "I do, too."

How natural is the following interpretation of Julie's reply?

I adore you, too (=Julie adores Paul).

| less natural | | | | | more natural |
| 1 | 2 | 3 | 4 | 5 | 6 |

>>

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[17] The questionnaire started with a consent followed by instructions explaining the notion of naturalness based on some practice examples. At the end, some questions were asked about the linguistic background of participants (esp. about their native language(s) and any other language(s) they may speak).

b.

Paul and Julie are lovers and like joking.

(Paul to Julie) "I adore you."
(Julie to Paul) "I do, too."

How natural is the following interpretation of Julie's reply?

I adore myself, too (=Julie adores Julie).

less natural					more natural
1	2	3	4	5	6

The availability of supersloppy readings was tested in various conditions, which each included six items. First, I varied the types of DPs involved in the antecedent and in the elided sentence so as to specify the relevant notion of dependency: I tested various combinations of person indexicals, non-person indexicals, proper names and mixtures of indexicals and third-person DPs. Second, the structural position of the intended binder was manipulated to test the relevance of locality (namely, c-command and clausemateness). Third, supersloppy readings were tested in both VP-ellipsis and focus constructions involving *only*.

The details of the conditions and the results obtained in each case will be presented in section 3 when relevant to the course of the argumentation. Table 1 below summarizes the main findings based on the responses of 231 participants[18] and compares them to the

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[18] 305 participants out of 536 were excluded from the study on the basis of several criteria defined a priori: the participants were only allowed to take the survey once, they had to spend a minimal amount of time on it (at least 7 minutes overall, given an expected time of about 20 minutes) and they had to pass all attention checks. The first type of attention check aimed at checking whether the participants were carefully reading the contexts by inserting specific instructions in them. The goal of the second type of attention check was to make sure that the participants had understood the task by making them rate obviously good or obviously bad interpretations of sentences as exemplified in (i) and (ii) respectively.

(i) *A group of friends is discussing the turn out of the party they threw last night.*

claims and predictions of the previous analyses. As will be explained, the results are not just based on absolute scores, but more importantly, on contrasts in scores between the various conditions, whose statistical significance was tested using t-tests.

Supersloppy readings…	Rebuschi (1994, 97)	Bevington (1998)	Chung (2000)	Present analysis	Results of questionnaire
…exist in English (with indexicals in VP-ellipsis constructions)	✗	✓	✓	✓	✓
… can coexist with strict readings	✗	✓	✓	✓	✓
… can involve a mixture of indexicals and third-person DPs	✗	✗	✓	✗	✗
… can involve reversal of the indexicals in the ellipsis site	?	✗	?	✓/✗	✓/✗
… require specific pragmatic conditions	?	✓	✓	✓	✓
…are subject to locality conditions	✓	✗	?	✓/✗	✓/✗
… can arise with non-person indexicals	?	✓	?	✓	✓
… can arise with proper names	(✗)	(✗)	✓	✓	✓
… can arise in focus constructions	?	?	?	✓/✗	✓/✗

Table 1. Predictions made by previous and present analyses and experimental results

Legend:
✓: predicted to hold (first four columns) or actually holds (last column)
✗: predicted not to hold (first four columns) or actually does not hold (last column)
?: not discussed or prediction unclear
(✗): implicitly predicted not to hold
✓/✗: predicted to hold only in some cases (first four columns) or actually holds only in some cases (last column)

(Mary to Sarah) "The party was a real success last night! Almost everybody we invited came."
(Sarah to Mary) "Only Gary did not come."
How natural is the following interpretation of Sarah's reply?
All the other invited people came to the party.
(ii) *Biology students are discussing their exam outside the class after taking it.*
(Anne to Yuonne) "What a difficult exam! I'm sure almost the whole class did poorly."
(Yuonne to Anne) "Probably only Trevor did well. He's so smart!"
How natural is the following interpretation of Yuonne's reply?
Everyone did well on the exam.
Participants rating interpretations like (i) lower than 4 and those like (ii) higher than 3 were disqualified. Such sentences thus constituted a baseline for both ends of the scale.

3. Proposal: supersloppy readings involving person indexicals in VP-ellipsis

This section specifies the details of my e-type analysis of supersloppy readings based on the experimental results concerning person indexicals in VP-ellipsis summarized in Table 2 below.

Supersloppy readings…	Results of experimental study
…exist in English (with indexicals in VP-ellipsis)	✓ (see section 3.1)
… can coexist with strict readings	✓ (see section 3.4)
… can involve a mixture of indexicals and third-person DPs	✗ (see sections 3.2, 3.3)
… can involve reversal of the indexicals in the ellipsis site	✓/✗ (see section 3.5)
… require specific pragmatic conditions	✓ (see section 3.4)
…are subject to locality conditions	✓/✗ (see sections 3.2, 3.4)

Table 2. Main experimental results about person indexicals in VP-ellipsis

3.1. The analysis applied to simple cases

The results of the questionnaire confirm that supersloppy readings are available in the simple case, i.e. when one indexical is the subject and the other indexical is (within) the object of the same verb, as illustrated in (29) (cf. (28)a) and (30) below (henceforth, all examples come from the questionnaire, unless otherwise noted).

(29) *Paul and Julie are lovers.*
    a. *(Paul to Julie)* "I adore you."
    b. *(Julie to Paul)* "I do, too."
       Intended interpretation: I adore you, too (=Julie adores Paul).

(30) *Lucy is arguing with her mother.*
    a. *(Lucy to her mother)* "You don't understand me."
    b. *(the mother to Lucy)* "You don't either."
       Intended interpretation: you don't understand me either (=Lucy does not
       understand Lucy's mother).
                [condition mean for (29)-(30): 5.09; SD: 1.6]

This condition (which – like other conditions – included 3 items structurally similar to (29) and 3 similar to (30)) received an average score of 5.09 (out of 6) across participants with an average standard deviation (SD) of 1.6 per item.[19]

    To account for these facts, the main idea of my analysis (previewed in section 1.2) is to hypothesize that each person indexical can be construed as a pronoun containing a

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[19] As is standard, result scores above or below 2 standard deviations away from the mean were eliminated.

variable bound by the other. In other words, indexicals, just like any other pronoun, can be interpreted as e-type pronouns in the appropriate discourse conditions. This is consistent with the observation reviewed in section 2.1 that indexicals can be bound just like any other pronoun. As we will see in section 3.3, this e-type analysis of supersloppy readings correctly predicts that supersloppy readings are only available if a binding relation can be established between the two indexicals in the antecedent and in the ellipsis site. For instance, *I* c-command *you* in (29)a and *I* c-commands the ellipsis site in (29)b; similarly, *you* c-commands *me* in (30)a and *you* c-commands the ellipsis site in (30)b.

Furthermore, the analysis relies on the hypothesis that the function used for the e-type interpretation of *you* and *me* in sentences like (29) or (30) has to be the indexical function INTER (like *interlocutor*) defined in (31), which relates the discourse participants (speaker s and addressee a of the context c) to each other.[20] Intuitively, INTER is close to Rebuschi's (1994, 1997) function ALTER, but is defined as directly manipulating context variables.

(31) $[\![\text{INTER}]\!]^{c,g} = \lambda x. \lambda y.$ y is an interlocutor of x
            where x and y $\in \{s_c, a_c\}$

As previewed in section 1.2, the restriction of the e-type function used for *you* and *me* to the value INTER derives from the indexicality of these pronouns. Adopting the presuppositional analysis of these pronouns mentioned in section 2.1, I assume that *you* and *me* are interpreted as variables associated with an indexical presupposition triggered by their person features (the only difference between their regular and their e-type interpretations being that the variable is more complex in the case of their e-type interpretation, i.e. *INTER* + pro_i instead of just pro_i). The indexical presupposition of these pronouns, I hypothesize, constrains their e-type function to be indexical itself, namely to only manipulate contextual parameters and be intensionally insensitive (unlike standard descriptions). As we will see in section 3.3, this correctly predicts that supersloppy readings can only arise in the presence of an indexical binder both in the antecedent and above the ellipsis site.

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[20] I here define INTER as an <e, et> function following Heim & Kratzer (1998), among others (cf. R in section 1.2), but note that INTER could also be defined as an <e,e> function as in Engdahl (1986), among others, as shown in (iii). Nothing hinges on this particular choice here.
    (iii) INTER(c)={<c(s), c(a)>, <c(a), c(s)>}

(29)a and (30)a can thus be rewritten as (32) and (33) as long as pragmatic conditions make the relation between discourse participants salient: functions used for e-type interpretations must indeed be sufficiently salient when the pronoun is processed (see Heim 1990, i.a.). As we will see in section 3.4, this correctly predicts that supersloppy readings require the interlocutor relation to be clearly relevant in the discourse.

(32) $[[$ I adore you $]]^{c,g} = [[$ I$_i$ adore the INTER(pro$_i$)$]]^{c,g}$
  presupposition: the INTER $(g(i)) = a_c$

(33) $[[$ you don't understand me $]]^{c,g} = [[$ you$_i$ don't understand the INTER(pro$_i$)$]]^{c,g}$
  presupposition: the INTER$(g(i)) = s_c$

The derivation of supersloppy readings is then similar to that of sloppy readings of indexicals reviewed in section 1.2. Under the presuppositional analysis of indexicals adopted here, this means that the person presupposition of bound pronouns is not interpreted in focus values (Heim 2008a, Sauerland 2013, i.a.; cf. Jacobson 2012). Assuming standard predicate abstraction after movement of the subject, the VPs to be copied into the ellipsis site in (29)b and (30)b thus denote the functions in (34) and (35) respectively. Given that the subjects *I* and *you* above the ellipsis site in (29)b and (30)b refer to the speaker and the addressee, respectively, of the context, they belong to the domain of the function INTER, thus licensing supersloppy readings. As we will see in section 3.3, non-indexical subjects, however, cannot trigger supersloppy readings.

(34) $[[\lambda i \ t_i$ adore the INTER(pro$_i$)$]]^{c,g} = \lambda x.$ x adore the INTER(x)

(35) $[[\lambda i \ t_i$ adore the INTER(pro$_i$)$]]^{c,g} = \lambda x.$ x do not understand the INTER(x)

The goal of the next sections is to further motivate this analysis based on facts revealed by the questionnaire that unambiguously argue for each of its ingredients. The facts presented in section 3.2 will show that binding conditions are required for supersloppy readings to arise. Those described in sections 3.3 and 3.4 will demonstrate that the function used for the e-type reading of *you* and *me* has to be the indexical function INTER and that it can only be used if the appropriate pragmatic conditions are met. In section 3.5, I will present data supporting the hypothesis that in supersloppy readings (just like in sloppy readings), the presuppositions of bound indexicals are not interpreted in the ellipsis site, and discuss some further facts potentially complicating the issue. Finally, I will examine the consequences

of the existence of supersloppy readings for the Kaplanian direct reference theory in section 3.6.

3.2. Obligatory bound variable

Our e-type analysis requires the argument of INTER to be bound. This correctly predicts the obligatoriness of c-command between the two indexicals for supersloppy readings to obtain: a two-sample heteroscedastic t-test[21] shows that the condition illustrated by (36)-(37) received significantly lower scores ($p < 0.001$)[22] than the condition represented by (29)-(30) above. This supports Rebuschi's (1997: 176) claim against Bevington's (1998: 93).[23]

(36) *Paul is talking to his sister Julie.*
    a. *(Paul to Julie)* "The man I hate loves you."
    b. *(Julie to Paul)* "The woman I hate does not."
       Intended interpretation: The woman I hate does not love you (=the woman Julie hates does not love Paul).

(37) *Paul is talking to his sister Julie.*
    a. *(Paul to Julie)* "The woman you hate loves me."
    b. *(Julie to Paul)* "The man you hate does not."
       Intended interpretation: The man you hate does not love me (=the man Paul hates does not love Julie).

                        [condition mean for (36)-(37): 3.25; SD: 1.95]

The binding requirement of our e-type analysis also correctly excludes examples like (38)-(41) where the bound interpretation of the indexical is not intended as the subject in the antecedent is a third-person DP: examples like (38)-(41) are significantly more

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[21] A t-test determines whether two samples are likely to have come from the same two underlying populations that have the same mean. The t-test is heteroscedastic when the two samples have unequal variance.

[22] The p-value is the probability returned by the t-test that the means of the two samples are equal. As is standard, I consider a p-value of 0.05 as the cutoff for statistical significance. All p-values that will henceforth be mentioned are calculated and interpreted in the same way.

[23] Bevington (1998: 93) claims that c-command is not required for supersloppy readings to obtain on the basis of examples like (iv).
    (iv) Speaker 1: "My heart is yours."
         Speaker 2: "Mine is, too."
But the fact that the possessive *my* does not c-command *yours* at any level of representation is controversial, given that examples like (v) below do not trigger a Weak Crossover Effect, and examples like (vi) do exhibit a bound reading.
    (v) [Every boy]$_i$'s mother loves him$_i$.
    (vi) Only my$_i$ mother hates me$_i$. (% [nobody else]$_i$'s mother hates them$_i$)

degraded than examples like (29)-(30) (p<0.001).[24]

(38) *Paul and his sister Julie are discussing the school elections.*
    a. *(Julie to Paul)* "Jonathan voted for me."
    b. *(Paul to Julie)* "#Mike did, too."
        Intended interpretation: Mike voted for me, too (=Mike voted for Paul).

(39) *Paul is talking to his sister Julie.*
    a. *(Paul to Julie)* "The handsome neighbor loves you."
    b. *(Julie to Paul)* "#His sister does not."
        Intended interpretation: His sister does not love you (=the handsome neighbor's
        sister does not love Paul).   [condition mean for (38)-(39): 2.73; SD: 2.08][25]

(40) *Paul and his sister Julie are discussing the school elections.*
    a. *(Julie to Paul)* "Jonathan voted for me."
    b. *(Paul to Julie)* "#Did you?"
        Intended interpretation: Did you vote for me, too? (= did Julie vote for Paul?)

(41) *Paul is talking to his wife Julie.*
    a. *(Paul to Julie)* "The handsome neighbor loves you."
    b. *(Julie to Paul)* "#I do, too."
        Intended interpretation: I love you, too (=Julie loves Paul).
                            [condition mean for (40)-(41): 3.01; SD: 1.97]

These examples show that *me* and *you* cannot be construed as unbound descriptions based on INTER: this would wrongly predict that the VPs interpreted as in (42) and (43) below can be copied into the ellipsis site and give rise to the readings indicated in (38)-(41)b.

(42) $\lambda x.\ x$ vote for the INTER(a_c)   [i.e. $\lambda c.\lambda x.\ x$ vote for the INTER(a_c)][26]

(43) $\lambda x.\ x$ love the INTER(s_c)   [i.e. $\lambda c.\lambda x.\ x$ love the INTER(s_c)]

Note that this follows from the general impossibility of copying the character (function from context to content in Kaplan's terms) into an ellipsis site: copying the VPs interpreted as in (44)-(45) into (38)b and (39)b would similarly overgenerate.

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[24] As expected, strict readings are however available in (38)-(41) [condition mean: 5.71; SD: 0.92] and can thus serve as controls. Even if this cannot be noted each time for space reasons, strict readings played this role in general unless otherwise noted (see discussion in section 3.4).

[25] In most cases, I illustrate conditions with each of the two indexicals for completeness. But in general (unless otherwise noted), the two types of examples are included in the same condition, because they do not statistically differ from each other (e.g. p=0.11 for (38) vs. (39)).

[26] I here use an extensional notation with context variables (instead of context parameters) to make more explicit that treating *me* and *you* as unbound descriptions would wrongly predict the availability of character copy in the ellipsis site.

(44) $\lambda x.\ x$ vote for s_c [i.e. $\lambda c.\lambda x.\ x$ vote for s_c]

(45) $\lambda x.\ x$ love a_c [i.e. $\lambda c.\lambda x.\ x$ love a_c]

This also argues against (pure) phonological identity conditions for ellipsis: the words *vote for me* and *love you* cannot simply be copied as such into the ellipsis site. Both of these alternative approaches overgenerate. Our analysis instead correctly predicts (38)-(41) to be unacceptable because the pronouns *me* and *you* in the antecedents cannot be interpreted as bound e-type pronouns, since the subject is a third-person DP which does not belong to the domain of INTER (as further detailed in the next section).

      For the same reason, examples like (46)-(47) below, which involve a third-person DP as subject of the elided sentence only, cannot be interpreted as indicated either: this interpretation was rated significantly lower (p<0.001) than the supersloppy interpretation of (29)-(30).

(46) *Julie and her brother Paul are arguing.*
    a. *(Julie to Paul)* "I hate you."
    b. *(Paul to Julie)* "#The handsome neighbor does, too."
      Intended interpretation: The handsome neighbor hates you, too (=the handsome neighbor hates Julie).

(47) *Julie and her brother Paul are arguing.*
    a. *(Julie to Paul)* "You lied to me."
    b. *(Paul to Julie)* "#The coach did, too."
      Intended interpretation: The coach lied to me, too (=the coach lied to Paul).
                                [condition mean for (46)-(47): 3.06; SD: 2.12]

Just as above, this is due to the fact that the VPs interpreted as in (48) or (49) and as in (50) or (51) cannot be copied into the ellipsis sites in (46)b and (47)b, respectively.

(48) $\lambda x.\ x$ hate the INTER(s_c)

(49) $\lambda x.\ x$ hate a_c

(50) $\lambda x.\ x$ lie to the INTER(a_c)

(51) $\lambda x.\ x$ lie to s_c

3.3. A dependency restricted to discourse participants

To be construed as e-type pronouns, *I* and *you* thus crucially need to include a bound variable, which requires establishing a dependency with a binder. But this is not the only condition: the results of our questionnaire confirm that the dependency has to be between discourse participants. The type of examples illustrated above, which mix indexicals and third-person DPs, remain deviant even under a dependent interpretation.

This is the case of examples like (46)-(47), which cannot be interpreted as follows either: (52)-(53) were rated significantly lower (p<0.001) than (29)-(30).

(52) *Julie and her brother Paul are arguing.*
    a. *(Julie to Paul)* "I hate you."
    b. *(Paul to Julie)* "#It sounds like the neighbor does, too."
    Intended interpretation: It sounds like the neighbor hates her interlocutor, too.

(53) *Julie and her husband Paul are arguing about the President's radio interview.*
    a. *(Julie to Paul)* "You lied to me."
    b. *(Paul to Julie)* "#The President just did, too."
    Intended interpretation: The President just lied to his interlocutor, too.
                         [condition mean for (52)-(53): 3.68; SD: 1.81]

In (52)-(53), the indexicals are intended to be construed as e-type pronouns involving a function "interlocutor" that takes a discourse participant as argument in the antecedent, but a non-discourse participant in the ellipsis site. The unavailability of this interpretation follows from our analysis, given that the referents of the third-person subjects of the elided VPs do not belong to the domain of INTER; the properties (54)-(55) obtained in the antecedent cannot therefore be copied into the ellipsis sites in (52) and (53), respectively.

(54) $\lambda x.$ x hate the INTER(x) [where $x \in \{s_c, a_c\}$]

(55) $\lambda x.$ x lie to the INTER(x) [where $x \in \{s_c, a_c\}$]

At this point, it could however be objected that the unacceptability of (52)-(53) is due to another factor, namely to the fact that the elided pronouns do not refer to discourse participants, thus violating their presupposition under the assumption that the presuppositional content of e-type indexicals in fact persists in focus alternatives (unlike what I have assumed so far based on sloppy readings of indexicals).

But examples like (56), originally discussed by Chung (2000), show that the objection does

not hold. The results of the experimental study reveal that these examples are significantly degraded (p< 0.001) as compared to (29)-(30) (pace Chung 2000).

(56) *Mary and Jane are talking about their husbands John and Bob.*
  a. *(Mary to Jane about her husband Bob)* "Bob would be reluctant to criticize you in public."
  b. *(Jane to Mary)* "John wouldn't be."
     Intended interpretation: John wouldn't be reluctant to criticize you in public.
     (=John wouldn't be reluctant to criticize Mary in public)
                                                    [condition mean: 3.59; SD: 1.99]

Even if both the pronoun in the antecedent (*you*) and the elided pronoun are intended to refer to discourse participants (addressees) and even if in the context of (56), the referent of *you* stands in a specific relation (*wife*) to the referent of its potential binder Bob, *you* has significantly greater difficulties being interpreted as a function of Bob in (56) (e.g. as *his wife*) than as a function of *I* in (29) (as *my interlocutor*): the VP interpreted as in (57) cannot (easily) be copied into the ellipsis site.

(57) λx. x be reluctant to criticize x's wife in public

This fact cannot be explained by the alternative assumption mentioned above: (56) is compatible with the hypothesis that person presuppositions of e-type indexicals persist in focus alternatives, since John's wife is the addressee in the second utterance (see section 3.5 for further discussion about this point). But it confirms that the domain of the function used for the e-type reading of indexicals must be restricted to discourse participants: indexicals cannot be construed as descriptions dependent on a third-person DP. In other words, sentences like (56) (just like (16) mentioned in section 1.2 above) support our hypothesis that INTER is the only possible value for the relational variable used for the e-type interpretation of indexicals.

As mentioned in section 1.2, I hypothesize that the specificity of indexicals is responsible for the restriction of the relational variable used for their e-type interpretation. This variable cannot be set to any other contextually salient function (such as the *spouse* relation in (56)) because it must satisfy the indexicality of the pronoun in which it is contained. As observed by Kaplan (see further discussion in section 3.5), indexicals are context-dependent but intensionally insensitive (i.e. world-and time-independent). This constraint (implemented as a presupposition under the present analysis) must remain satisfied under e-type

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interpretations of indexicals. The e-type function must therefore only be dependent on the context, not on world and time parameters. This entails that it can only relate contextual parameters to each other and only the INTER function defined as in (58) (cf. (31)) meets this criterion.[27]

(58) $[[\text{INTER}]]^{c,g} = (\lambda c.)\lambda x. \lambda y.$ y is an interlocutor of x (in c)
where x and y $\in \{s_c, a_c\}$

Given that INTER, unlike standard e-type functions, depends on the context, one further detail remains to be specified: the context argument c of INTER does not remain open in focus alternatives, but is saturated. Consider the following scenario (imagined by Bevington 1998: 100): two lovers (say, Paul and Julie) are watching a movie, in which one of the characters says *I love you* to another character; Paul turns to Julie and says *I do, too.* As reported by Bevington, the intuition here is that this sentence only exhibits the strict reading that Paul loves the movie star, not the supersloppy reading that he loves Julie (or this would feel like a joke). The exclusion of such readings shows that the context of the INTER function must be fixed. This means that its domain is not $\{c(s), c(a)\}$ where c remains a variable when copied into the ellipsis site, but the set of the two interlocutors of the context of the first utterance (i.e. the two lovers in the movie in the scenario above). Note that simple cases like (29) above, which involved a dialog between two people, could not settle this issue as the two interlocutors remain the same in the antecedent and in the elided sentence.

Finally, note that plural indexicals may complicate the story. For simplicity and space reasons, I leave their detailed investigation for further research (they were not included in the questionnaire), but here is the gist of the issue. On the basis of example (59) (where the speaker is Michael's spouse) inspired by Rullmann's (2004) cases, Jacobson (2012: 35) claims that unlike first person singular pronouns, first person plural pronouns can give rise to e-type readings.

(59) Some people think that they should do more work than their spouse. Some people think that they should do less work than their spouse. Only MICHAEL thinks that <u>we</u> should do exactly the same amount of work.

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[27] This is the case if we restrict the arguments of the function to individuals. The inclusion of time and location parameters may open further possibilities as will be discussed in section 4.1.1.

This suggests that unlike INTER, the function used for the e-type interpretation of plural indexicals need not range over discourse participants only. How can we reconcile this fact (if confirmed by future experimental studies) with the facts reviewed above in (56)? This difference, I speculate, may be due to the specificity of plural indexicals, which, unlike singular indexicals, do not only contain discourse participants in their reference, but can denote mixed groups including both discourse participants and non-discourse participants (see Wechsler 2010 and references therein): as *we* is not purely indexical, its e-type function need not be purely indexical either. That said, how exactly this can work remains an open question. At first glance, it still seems to be the case that in (59), the speaker (included in the referent of *we*) must somehow be interpreted as *x's spouse*, thus making the first person feature contained in *we* intensionally sensitive. I leave this issue for future research (but see fn. 42 for a further caveat about this case).

3.4. The role of pragmatics

The key of the present analysis is to hypothesize that discourse participants are not always directly defined by their role in the context (i.e. as the speaker or the addressee of the context), but can also be interpreted through their relation to each other in the context (the interlocutor of the speaker or addressee in the context). This possibility arises in pragmatic conditions that make this relation highly salient and relevant: as already noticed by Bevington (1998: 151-163) and Chung (2000: in a remark attributed to Jim McCloskey), supersloppy readings preferably obtain in situations of love, conflict, negotiation or any other type of specific interaction between the two interlocutors. The results of the questionnaire confirm this observation: examples like (60)-(61), in which the relation between the two discourse participants is not relevant to the discourse, received a significantly lower score (p<0.001) than examples like (29)-(30) above, in which it is.

(60) *Claire is talking to a neighbor.*
    a. *(Claire to the neighbor)* "I came across your daughter yesterday."
    b. *(the neighbor to Claire)* "I did, too."
       Intended interpretation: I came across your daughter yesterday, too. (=the neighbor came across Claire's daughter yesterday)

(61) *Robert is talking to a neighbor, who is as keen on cars as he is.*
a. *(Robert to the neighbor)* "Do you like my new car?"
b. *(the neighbor to Robert)* "Do you?"
Intended interpretation: Do you like my new car? (=does Robert like the neighbor's new car?)

[condition mean for (60)-(61): 3.24; SD: 2.03]

In (60)-(61), the relation (of neighbor) between the interlocutors is not salient and is irrelevant to the discussion. This contrasts with (29)-(30), where the dialogs are about the relation between two lovers and the conflict between a daughter and her mother, respectively. This importance of pragmatics is predicted by our e-type analysis. In general, the hidden predicate of e-type pronouns is considered to be a free variable that is contextually defined. In the case of indexicals, this implies that they can only be interpreted as e-type pronouns if the relation of interlocutor is contextually salient and relevant. The role of the pragmatic conditions is not to define this relation, which is given in all dialogs, but to bring it to the fore by making it directly relevant to the content of the dialog.

The role of pragmatics also explains why strict readings are significantly more available ($p < 0.001$) in the counterparts of (60)-(61), namely in (64)-(65) below, than in the counterparts of (29)-(30), namely in (62)-(63) below.

(62) *Paul and Julie are lovers and like joking.*
a. *(Paul to Julie)* "I adore you."
b. *(Julie to Paul)* "I do, too."
Intended interpretation: I adore myself, too (=Julie adores Julie).

(63) *Lucy is arguing with her mother.*
a. *(Lucy to her mother)* "You don't understand me."
b. *(the mother to Lucy)* "You don't either."
Intended interpretation: You don't understand yourself either (=Lucy does not understand Lucy).   [condition mean for (62)-(63): 2.89; SD: 1.84]

(64) *Claire is talking to a neighbor.*
a. *(Claire to the neighbor)* "I came across your daughter yesterday."
b. *(the neighbor to Claire)* "I did, too."
Intended interpretation: I came across my daughter yesterday, too.
(=the neighbor came across the neighbor's daughter yesterday)

(65) *Robert is talking to a neighbor, who is as keen on cars as he is.*
a. *(Robert to the neighbor)* "Do you like my new car?"
b. *(the neighbor to Robert)* "Do you?"

Intended interpretation: Do you like your new car? (=does Robert like Robert's new car?) [condition mean for (64)-(65): 4.73; SD: 1.57]

The situation in examples like (29)-(30) and (62)-(63) strongly favors the e-type construal of indexicals because the dialogs are precisely about the relation between the speaker and the addressee; that's why the supersloppy readings of (29)-(30) significantly outweigh (p<0.001) the strict readings in (62)-(63). This does not mean, however, that strict readings are always unavailable in configurations involving two indexicals, contrary to what is claimed by Rebuschi (1994, 1997): conversely, the strict readings of (64)-(65) are significantly more available (p<0.001) than the supersloppy readings of (60)-(61). This derives from the fact that the contextual situation in (60)-(61)/(64)-(65) does not bring to the fore the INTER relation, thus disfavoring the e-type construal of indexicals.

The role of pragmatics furthermore accounts for the contradictory observations in Rebuschi (1994, 1997) and Bevington (1998) regarding clausemateness.[28] At first glance, supersloppy readings seem to require the two indexicals to be in the same clause, as observed by Rebuschi (1994, 1997). Sentences like (66) or (67) below (with an animate or an inanimate intervener, respectively) received a significantly lower score than (29)-(30) (p<0.001).

(66) *Tom is talking to his dance partner Sue about Paul, the ballroom dancing teacher.*
    a. *(Tom to Sue)* "I think that Paul hates you."
    b. *(Sue to Tom)* "I do, too."
    Intended interpretation: I think that Paul hates you, too (=Sue thinks that Paul hates Tom).
                           [condition mean for (66): 2.61; SD: 2]

(67) *Sue is talking to her dance partner Tom.*
    a. *(Sue to Tom)* "I think that rock music makes you dance better."
    b. *(Tom to Sue)* "I do, too."
    Intended interpretation: I think that rock music makes you dance better, too.
    (=Tom thinks that rock music makes Sue dance better).
                           [condition mean for (67): 2.93; SD: 1.99]

But if we control for the pragmatic conditions and make the relation between the two interlocutors directly relevant to the discourse as in (68)-(69) below (cf. Bevington 1998: 94), the apparent locality requirement disappears: examples such as (68)-(69) are

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[28] Thanks to an anonymous reviewer for suggesting the solution to this issue.

significantly more acceptable than (66)-(67) (p<0.001) and do not significantly differ in score from examples like (29)-(30) (p=0.09).

(68) *Sue and Tom are lovers.*
    a. *(Sue to Tom)* "I think the world would be a terrible place if you weren't in it."
    b. *(Tom to Sue)* "I do, too."
    Intended interpretation: I think that the world would be a terrible place if you weren't in it, too. (=Tom thinks that the world would be a terrible place if Sue wasn't in it).   [condition mean for (68): 4.71; SD: 1.74]

(69) *Jay is talking to his girlfriend Susan.*
    a. *(Jay to Susan)* "You don't know the first thing about the way I feel."
    b. *(Susan to Jay)* "You don't either."
    Intended interpretation: You don't know the first thing about the way I feel, either (=Jay doesn't know the first thing about the way Susan feels).
                                    [condition mean for (69): 4.11; SD: 1.37]

Thus, supersloppy readings are not subject to locality conditions, but to binding and pragmatic conditions, as predicted by our e-type hypothesis.

3.5. The status of person presuppositions

In section 3.1, I have claimed that just like in the case of sloppy readings of indexicals (cf. section 2.1), the presuppositional content of indexicals in supersloppy readings is disregarded in focus alternatives (cf. Heim 2008a, Sauerland 2013, Jacobson 2012). All examples of the questionnaire reviewed so far are compatible with this claim, but none of them can prove the point. In the case of sloppy readings of indexicals reviewed in section 2.1, this proposal is motivated by the fact that focus alternatives can involve non-discourse participants as shown in (70) (cf. (19)). But as we saw in section 3.3, this is not the case of supersloppy readings as illustrated in (71) (cf. (52)): the elided pronoun must refer to a discourse participant.

(70) a. Only you eat what you cook.   *Kratzer 2009*
        i. [Nobody else]$_i$ eats what they$_i$ cook.   *(sloppy)*
        ii. Nobody else eats what you cook.   *(strict)*
    b. You eat what you cook, but your classmates don't.
        i. [Your classmates]$_i$ don't eat what they$_i$ cook.   *(sloppy)*
        ii. Your classmates don't eat what you cook.   *(strict)*

(71) *Julie and her brother Paul are arguing.*
    a. *(Julie to Paul)* "I hate you."
    b. *(Paul to Julie)* "#It sounds like the neighbor does, too."
       Intended interpretation: It sounds like the neighbor hates her interlocutor, too.

This observation, however, does not argue against the claim that presuppositions are ignored in focus alternatives either: as we explained in section 3.3, examples like (71) are already ruled out by the definition of the function INTER; the alternative hypothesis that presuppositions are preserved in focus alternatives, though compatible with this type of examples (and all other examples reviewed so far), would not change the predictions. Furthermore, this alternative hypothesis would not be sufficient to rule out all examples excluded by the restrictive definition of INTER, which does not only exclude examples such as (71), where both the value and the argument of the function are not indexical, but also examples such as (72) (cf. (56)) where only the argument of the function is not indexical: assuming that person presuppositions persist in focus alternatives would not exclude this latter type of examples (as long as we assume that the context of the presupposition is not fixed to the context of the first utterance, as is required by the simple cases in (29)-(30)).

(72) *Mary and Jane are talking about their husbands John and Bob.*
    a. *(Mary to Jane about her husband Bob)* "Bob would be reluctant to criticize you in public."
    b. *(Jane to Mary)* "John wouldn't be."
       Intended interpretation: John wouldn't be reluctant to criticize you in public.
       (=John wouldn't be reluctant to criticize Mary in public)
                           [condition mean: 3.59; SD: 1.99]

Thus, even if the hypothesis that the presuppositional content of indexicals is disregarded in focus alternatives does not affect the predictions regarding supersloppy readings, it is not supported by any fact so far, but only by considerations of parsimony, which imply that supersloppy readings of indexicals should behave both like sloppy readings of indexicals (see section 2.1) and like focus readings of e-type pronouns (see Jacobson 2012).[29]

Critical examples for testing this hypothesis are examples like (73), where the dependency between *I* and *you* is reversed in the elided sentence. The results of the questionnaire

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[29] Jacobson (2012:31) shows that the gender feature of e-type pronouns is ignored in focus alternatives on the basis of examples like (vii), in which the alternative spouses need not be interpreted as being female.
   (vii) For the departmental Christmas party, every faculty member was encouraged to bring their/his or her spouse. But only BILL brought her.

indicate that this type of examples is acceptable (*pace* Bevington 1998: 103, 116): examples like (73) do not significantly differ (p=0.095) from examples like (29).

(73) *Sam is talking to her friend Lynn about the previous day when they met at the market by chance.*
(Sam to Lynn) "I noticed you before you did."
Intended interpretation: I noticed you before you noticed me (=Sam noticed Lynn before Lynn noticed Sam).   [condition mean: 4.74; SD: 1.32]

This type of example directly supports the hypothesis that person presuppositions are not interpreted in focus alternatives as shown in (74).

(74) I_i [$_{VP1}$ noticed you] before you did [$_{VP2}$...].
  a. $[\![VP_1]\!]^{c,g} = \lambda x.$ x notice the INTER(x); presupposition: the INTER(x) = a_c
  b. $[\![VP_2]\!]^{c,g} = \lambda x.$ x notice the INTER(x)

If person presuppositions were preserved in the ellipsis site, the elided pronoun in VP$_2$ would be predicted to obligatorily refer to the addressee, which is in principle a possible value of INTER, but is incompatible with the e-type construal of the pronoun in this case: both x (due to the binder *you* above VP$_2$) and the INTER(x) (due to the presupposition) would have to refer to the addressee, which is impossible given the definition of INTER. The availability of the supersloppy reading, under which the elided pronoun refers to the speaker, can only be derived under the hypothesis that focus is blind to the presuppositional content of pronouns.

This may not be the end of the story, however. In the rest of this section, I discuss a problematic data point, which may question this conclusion and suggest an alternative. Given that the empirical point would require further investigation, this discussion remains speculative.

The problematic data point is the relative unavailability of examples like (75), which involve the other possible type of reversal: according to the experimental results, examples like (75) significantly differ in scores both from examples like (73) (p<0.001) and from examples like (30) (p<0.001).

(75) *Carl is thanking his colleague.*
(Carl to his colleague) "You helped me even when I did not."
Intended interpretation: You helped me even when I did not help you. (=Carl's colleague helped Carl even when Carl did not help Carl's colleague)
                                                                              [condition mean: 2.98; SD: 1.8]

Under the hypothesis that person presuppositions are disregarded in focus alternatives, (75) should be as acceptable as (73). Conversely, the reverse hypothesis (rejected above) that person presuppositions persist in focus alternatives would predict that (73) should be as unacceptable as (75).

As suggested by a reviewer, this issue may only be apparent and due to the fact that (73) and (75) are not minimal pairs. In fact, the reviewer suggests that (76) is not worse than (73), that (77) is conversely not better than (75), and that both (78)a and (78)b have an equivalent grammaticality status.[30]

(76) I think you must have noticed me before I did.

(77) You know, I helped you even when/though you didn't.

(78) a. I know I love you, but I'm just not sure that you do.
    b. I know you love me, but I'm just not sure that I do.

The specificity of these examples, which do not involve a dialog (but only one context) and in which the ellipsis occurs in a subordinate clause, could be responsible for this variability in judgments by further restricting the pragmatic conditions on which the availability of the function INTER depends. Further empirical investigation would thus be required to settle this point.

That said, were the contrast between examples like (73) and (75) to be confirmed after stricter control of the data, how could we account for it? I would like to suggest a potential solution, which would incorporate two additional ingredients. First, the unavailability of (75) would imply that the person presuppositions must be preserved in focus alternatives after all, thus introducing an asymmetry between sloppy and supersloppy readings of indexicals: for some reason to be determined, the e-type interpretation of indexicals would force them to retain their person presupposition in focus alternatives. Second, the contrast between (73) and (75) would entail that the presuppositions of first and second person pronouns are not symmetrical. Specifically, their presuppositions would have to be redefined so as to license (73), but not (75). A definition like (79), which makes *me* more

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[30] I am grateful to this anonymous reviewer for detailed empirical and theoretical comments about this point.

specified than *you* (cf. Sauerland 2003, 2008), would achieve the desired result as shown in (80)-(81).

(79) a. $[[\text{ I}_i \text{ }]]^{c,w,g}$ = g(i); presupposition: g(i) is the speaker in c
b. $[[\text{ you}_i \text{ }]]^{c,w,g}$ = g(i); presupposition: g(i) is a discourse participant in c

(80) I$_i$ [$_{VP1}$ noticed you] before you did [$_{VP2}$…].
$[[\text{VP}_2]]^{c,g}$ =λx.x notice the INTER(x); presupposition: the INTER(x) is a discourse participant in c

(81) *You$_i$ [$_{VP1}$ helped me] when I did not [$_{VP2}$…].
$[[\text{VP}_2]]^{c,g}$ =λx.x help the INTER(x); presupposition: the INTER(x) is the speaker in c

This move would receive two types of independent support.

First, it has been independently argued that presuppositional features of pronouns enter in a subset relationship (see Sauerland 2003, 2008, Heim 2008b, i.a.). For instance, instead of assuming that the singular feature expresses the presupposition that the referent is an atom (or a mass) and the plural feature that it is a plurality, Sauerland (2003, 2008) proposes that only the singular feature introduces a presupposition; the plural feature has no inherent presupposition. Similarly, it has been argued that the third person feature does not introduce any presupposition, while the first person feature introduces the presupposition that the referent includes the speaker (Sauerland 2003, 2008, Heim 2008b, i.a.). This type of hypothesis presents the theoretical advantage of reducing the burden on the lexicon while making no difference in empirical predictions in most cases. The elimination of weaker presuppositions from the lexicon (e.g. for plural or third person features) is compensated by the use of implicated presuppositions or anti-presuppositions based on Heim's (1991b) pragmatic principle *Maximize Presupposition* (see Sauerland 2008, Heim 2008b, Chemla 2008, Singh 2011, Schlenker 2012, i.a.). In a nutshell (see above references for detailed discussion), the hypothesis (applied to third vs. first person features here) is the following: first and third person features are the two alternatives of a scale with different presuppositional strengths: {1P > 3P}; *Maximize Presupposition* compares Logical Forms containing first and third person pronouns whose assertive components are contextually equivalent; among the competitors, *Maximize Presupposition* selects the Logical Form that carries the strongest presupposition compatible with the context. Thus, the choice of (82)a

over (82)b gives rise to the implicated presupposition that in (82)a, the referent g(i) does not include the speaker (Heim 2008b).[31]

(82) a. She$_i$ is French.
    b. I$_i$ am French.

Similarly in our cases, the choice of (83)a over (83)b gives rise to the implicated presupposition that the referent g(i) is not the speaker in (83)a; g(i) is therefore the addressee, since *you* expresses the presupposition that g(i) is a discourse participant.

(83) a. You$_i$ are French.
    b. I$_i$ am French.

Furthermore, in the few cases where implicated presuppositions make different empirical predictions than lexical presuppositions, these are good predictions. For instance (see Sauerland 2003, 2008 for further types of arguments), Heim (2008b: 41-42) shows that this correctly predicts that by not using (84)b or (84)c instead of (84)a, the speaker merely implicates in (84)a that she cannot presuppose that every girl includes the speaker or every girl includes the addressee; this correctly licenses the interpretation according to which one of the girls is the speaker or the addressee.

(84) a. Every girl likes herself.
    b. Every girl likes me.
    c. Every girl likes you.

For our current purposes, this type of hypothesis makes the correct prediction for (73). In that case, *Maximize Presupposition* does not come into play because under the e-type interpretation of *you* roughly represented in (85)a, (73) does not have a competitor with a

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[31] As explained in detail in Chemla (2008) and Schlenker (2012) on the basis of various types of anti-presuppositions, this result requires further assumptions. Under the traditional notion of presupposition, the inference of (82)a would be weaker: (82)a would merely imply that p (*g(i) includes the speaker*) is not part of the common ground, so that the referent of *she* would be understood to exclude the speaker only if the addressee already believes p to be false (for instance because of a pointing gesture of the speaker). The inference of (82)a is however suitably stronger under the modern view of presuppositions discussed in Chemla (2008) and Schlenker (2012), according to which it is sometimes enough to present oneself as presupposing that p to ensure that the common ground ends up satisfying p (i.e. a presupposition can convey new information to the addressee). In that case, (82)a implies that it is not the case that the speaker believes p or it is not the case that the speaker believes to be an authority about p. Assuming Competence (the speaker is opinionated about p) and Authority (the speaker believes in her authority about p), we can further derive the stronger inference that the speaker believes p to be false (i.e. *g(i) does not include the speaker*). The competence and authority assumptions are easily justified in the cases that interest us here since the speaker is obviously in a good position to be opinionated and to be an authority about being the referent or not (except in some rare cases of mistaken identity).

stronger presupposition that has a contextually equivalent assertive component: the only potential competitor (85)b, which has a stronger presupposition, is not well-formed since the e-type interpretation of the pronoun *me* is in this case incompatible with its presupposition. Conversely, the weak presupposition of *you* in (85)a does not leave the referent unspecified even if *Maximize Presupposition* is not applied, because *you* receives an e-type interpretation (INTER can only return the addressee here since it takes the speaker as argument).[32]

(85) a. I noticed you before you did, i.e. I_i noticed the INTER(pro_i) before you did.
    presupposition: the INTER($g(i)$) is a discourse participant in c
   b. I noticed {me/myself} before you did, i.e. I_i noticed the INTER(pro_i) before you did
    presupposition: the INTER($g(i)$) is the speaker in c

Second, both morphological and semantic facts support the hypothesis that there is an asymmetry between first and second persons (cf. Zwicky 1977, Noyer 1992, i.a.). In particular, Sauerland (2008:26) argues mainly on the basis of agreement facts like (86) that the feature specification of the first person [participant, speaker] is more marked than the specification of the second person [participant], which corroborates (79). According to him, the dominance of first over second person shown by the first person plural pronominal form in (86)a and the first person plural agreement in (86)b would be unexpected if the category first person was not more marked than second person.[33]

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[32] However, (85)a does compete with (85)b if *you* and *me* are not interpreted as e-type pronouns, and as in simple cases like (83)a, the application of *Maximize Presupposition* yields the result that *you* does not refer to the speaker (but to the addressee). In that case, the same must furthermore hold of the elided pronoun in the ellipsis site (as well as the pronoun above the ellipsis site), which gives rise to a strict reading. This interestingly suggests that the application of *Maximize Presupposition* must be part of the identity conditions on ellipsis (i.e. the stronger implicated presupposition must be copied into the ellipsis site rather than the weaker lexical presupposition). I leave for further research the exploration of this point, which furthermore bears on the question whether *Maximize Presupposition* should apply globally or locally (see Singh 2011).

[33] The semantics of plural indexicals, however, seems to complicate the issue by suggesting an asymmetry in the other direction: while *we* can include the addressee(s), plural *you* cannot include the speaker (cf. Zwicky 1977, Noyer 1992, i.a.). This led Heim (2008b) to specify the presuppositions of plural first- and second-person pronouns as in (viii) (notation mine). Transposing this definition into the singular case, we would obtain the definitions in (ix), under which the second person is more marked than the first person.

    (viii) a. $[\![1st_i]\!]^{c,w,g} = g(i)$; presupposition: $g(i)$ includes s_c
        b. $[\![2d_i]\!]^{c,w,g} = g(i)$; presupposition: $g(i)$ includes a_c and excludes s_c
    (ix) a. $[\![me_i]\!]^{c,w,g} = g(i)$; presupposition: $g(i)$ is a discourse participant in c
       b. $[\![you_i]\!]^{c,w,g} = g(i)$; presupposition: $g(i)$ is a discourse participant and is not the speaker in c
This hypothesis, however, would make the opposite predictions regarding (73) and (75), unless we add a third additional assumption, namely that the presupposition target is not the value of INTER, but the argument of INTER, as shown in (x)-(xi).

    (x) I_i [$_{VP1}$ noticed you] before you did [$_{VP2}$…].
       $[\![VP_2]\!]^{c,g} = \lambda x.x$ notice the INTER(x); presupposition: x is a discourse participant

(86) a. You and I, we, are special.

    b. Du und ich sind /*seid   etwas   besonderes.   [German]
      you and I   be.1plur /*be.2plur something special
    'You and I are something special.'

This tentative hypothesis (according to which feature presuppositions, which are asymmetrical, persist in focus alternatives) makes testable predictions regarding gender and number features of non-indexical e-type pronouns. Concentrating on gender, it is usually assumed that the feminine gender is more marked than the masculine gender (Sauerland 2008, i.a.), which implies that the gender presuppositions of *he* and *she* could be defined as in (87).

(87) a. $[\![\,he_i\,]\!]^{c,w,g}$ = g(i); presupposition: g(i) is human
    b. $[\![\,she_i\,]\!]^{c,w,g}$ = g(i); presupposition: g(i) is female

This should entail an asymmetry between (88) and (89), which are parallel to (73) and (75): the genders of the e-type pronouns and their antecedents are reversed in the ellipsis site (assuming a scenario including only heterosexual couples). Specifically, (89) is predicted to be worse than (88) under the assumptions in discussion.

(88) Every woman who has a spouse [$_{VP1}$ brought him to the party]. No man who has a spouse did [$_{VP2}$…].
    $[\![\,VP_1\,]\!]^{c,g}$ = $[\![\,VP_2\,]\!]^{c,g}$ = λx. x bring the R(x) to the party; presupposition: the R(x) is human

(89) Every man who has a spouse [$_{VP1}$ brought her to the party]. No woman who has a spouse did [$_{VP2}$…].
    $[\![\,VP_1\,]\!]^{c,g}$ = $[\![\,VP_2\,]\!]^{c,g}$ = λx. x bring the R(x) to the party; presupposition: the R(x) is female

To my knowledge, this type of cases has never been examined. A systematic examination of such facts should shed further light on the status of presuppositions in the case of e-type readings in general, including our supersloppy cases. I leave this for future research.

    (xi) *You$_i$ [$_{VP1}$ helped me] when I did not [$_{VP2}$…].
        $[\![\,VP_2\,]\!]^{c,g}$ =λx.x help the INTER(x); presupposition: x is a discourse participant and is not the speaker in c

This would be supported if sentences like (88) turned out to be better than sentences like (89). But note that under this additional assumption, the surface features of indexicals interpreted as e-type pronouns would remain unmotivated.

3.6. Consequence for the Kaplanian direct reference theory

Whatever solution is provided to the presupposition issue just discussed, the availability of supersloppy readings challenges Kaplan's (1977/1989) in a new way, as compared to previous observations regarding shifted indexicals (Schlenker 2003, Anand 2006, i.a.) and bound indexicals (Partee 1989, Heim 1991a, i.a.; see section 2.1.). Supersloppy readings neither question the absence of monsters nor the context-dependency and intensional insensitivity of indexicals, but they question the fixity of indexicals in two ways: indexicals can in fact be bound and they can introduce synonymous descriptive meanings relevant to the interpretation of (elided) sentences.

First, the availability of supersloppy readings confirms the fact already suggested by sloppy readings of indexicals that indexicals can be bound and are thus sensitive to an assignment function, just like third-person pronouns. As we saw, the derivation of supersloppy readings requires indexicals to be interpreted as e-type pronouns containing a bound variable. As compared to sloppy readings of indexicals, supersloppy readings furthermore unambiguously show that this is an instance of real indexical binding. Recall indeed from section 2.1 that sloppy readings of indexicals can be analyzed in various ways, some of which (Kratzer 2009, i.a.) distinguish between real indexicals (which cannot be bound) and fake indexicals (which are a different type of pronoun – minimal pronouns – that can be bound). As explained in section 3.3, the empirical specificities of supersloppy readings, which, unlike sloppy readings of indexicals, are incompatible with third-person binders in elided sentences, show that the person features of e-type indexicals must be interpreted in the antecedent: this does not only explain why e-type indexicals have the same form as regular indexicals, this also explains why the function used for their e-type interpretation must be restricted to an indexical function (INTER). Moreover, the reversal facts discussed in section 3.5 may suggest that person features of e-type indexicals must even be interpreted in the focus alternatives, which would not only further argue against the minimal pronoun approach, but also against approaches like Cable (2005) that involve monstrous predicate abstraction instead of sensitivity to the assignment function. Therefore, there seems to be no alternative any more to abandoning the Kaplanian claim that the semantic value of indexicals is determined by the context, which fixes them, rather

than by an assignment function: they are in fact dependent on both parameters (context and assignment function) and do not thus have a fixed reference.

Second, supersloppy readings prove to be incorrect the Kaplanian claims that the descriptive meaning of indexicals cannot be relevant to the interpretation of sentences and that indexicals do not have synonyms. *I* and *you* cannot only be described, respectively, as *the speaker of the context* and *the addressee of the context*, but also, respectively, as *the interlocutor of the addressee of the context* and *the interlocutor of the speaker of the context*, and these various descriptions affect the interpretation of elided sentences.

This does not imply that the Kaplanian claim that indexicals are insensitive to world and time parameters must also be abondoned. In fact, supersloppy readings support the intensional insensitivity of indexicals. For instance, *me* in (90) below (a variation on (30) from the questionnaire), just as in the simple case (illustrated in (18) above), cannot be interpreted in the scope of the adverbial quantifier *never*: the description *x's interlocutor* supplied by the e-type construal cannot depend on world or time parameters.

(90) *Lucy's mother to Lucy*: "#You never understand me".
   Intended interpretation: Lucy never understands her interlocutor.

Similarly, the e-type construal of indexicals does not give rise to *de dicto* non *de re* readings in intensional contexts as shown below: *you* in (91) cannot be interpreted as the individual that Lucy wrongly thinks is my interlocutor.

(91) *I am on the phone with my Chinese friend Lisi, but Lucy mistakes Lisi's voice for my French friend Paul's voice, whom she thinks is Canadian. I am telling Lisi on the phone:*
   "#Lucy thinks that you are Canadian."
   Intended interpretation: Lucy thinks that Paul is Canadian.

Under the present analysis, this is derived by the fact that the indexical function INTER does not depend on world and time parameters, but only on the context, as required by the presuppositional content of e-type indexicals (see section 3.3). Furthermore, the description remains unbound in (91), while we saw that indexical e-type pronouns must be bound.

Supersloppy readings thus show that despite their intensional insensitivity, indexicals can introduce descriptive meanings that affect the interpretation of (elided)

sentences, as long as their descriptive meaning is only dependent on the context. This implies that the hidden predicate must be world-independent and only relates context-dependent elements, as is the case of INTER. In other words, the descriptive meaning of indexicals does not necessarily determine their referent directly with respect to the context, as claimed by Kaplan, but can also do so through the mediation of another element of the context.

Nunberg (1993) has provided other examples that seem to challenge the Kaplanian claim that indexicals cannot contribute properties into the truth conditions of sentences: in (92) (from Nunberg 1993: 20) for instance, the indexical *I* appears to be interpreted as the description *the condemned prisoner*.

(92) *Condemned prisoner*: "I am traditionally allowed to order whatever I like for my last meal."
Intended interpretation: the condemned prisoner is traditionally allowed to order whatever he likes for his last meal.

This type of examples is different from supersloppy readings. In (92), the description introduced by the indexical does seem to be world-dependent as it is interpreted under the scope of the quantificational adverb *traditionally*. Furthermore, this description is not based on the intrinsic meaning of *I*, but exclusively on pragmatic conditions: it corresponds to the characteristics of the referent of the indexical in the context (e.g. the speaker happens to be a condemned prisoner). This led Nunberg (1993) to suggest that these examples do not in fact challenge the direct reference theory of indexicals: it remains the case that the descriptive meaning of *I* ("the speaker of the utterance") does not characterize the interpretation of (92), but the indexical provides an individual (by direct reference) that corresponds to the interpretation. The descriptive content is thus supplied at a pragmatic level: it is because the speaker instantiates a specific class of people in the scenario that *I* can be understood to describe that class.[34] On the contrary, the descriptive meaning of indexicals applies at the semantic level in the case of supersloppy readings.

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[34] Nunberg (1993) denies that this is a general pragmatic process because proper names, for instance, do not give rise to the same kind of readings as shown below (from Nunberg 1993: 21). But he assumes that *I* and *you* can contribute properties because of the pragmatic presuppositions attached to them (rather than the semantic rules that determine their interpretations).
(xii) Darnay (the prisoner currently in cell 15) is traditionally allowed to order whatever he likes for his last meal.

4. Extensions: beyond person indexicals in ellipsis

The main goal of this paper was to explain supersloppy readings involving person indexicals in VP-ellipsis constructions. In this last section, I sketch how this phenomenon extends to other expressions and other constructions, as summarized in Table 3, and what it can reveal about them.

Supersloppy readings…	Results of experimental study
… can arise with non-person indexicals	✓ (section 4.1)
… can arise with two proper names	✓ (section 4.2)
… can arise in focus constructions	✓/✗ (section 4.3)

Table 3. Experimental results about supersloppy readings
beyond person indexicals in VP-ellipsis

4.1. Other indexicals

As we saw, the existence of supersloppy readings shows that the person indexicals *I* and *you* can be interpreted as dependent on each other. This raises the question whether relations between other coordinates of the context can give rise to other types of supersloppy readings. The results of the questionnaire show that this is the case: location and time indexicals, as well as demonstratives, can also be construed as e-type pronouns.

4.1.1. Location and time indexicals

First, the location indexical *here* can be interpreted as dependent on *I* as already observed by Bevington (1998: 211): the scores received by examples like (93) are as high (p=0.6) as those received by examples like (29)-(30).

(93) *Rachel is in Kamchatka, and Simon is in Yakutsk. They are talking over Skype.*
    a. *(Rachel to Simon)* "I feel good here!"
    b. *(Simon to Rachel)* "I do, too."
    Intended interpretation: I feel good here, too (=Simon feels good in Yakutsk).
                                                   [condition mean: 5.1; SD: 1.35]

This implies that *here* can be construed as an indexical e-type pronoun involving the indexical function LOC relating the speaker s of the context c to her location l as defined in

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We could instead assume that this pragmatic process cannot apply to Darnay in (xii) because the description provided by the proper name (*the individual named Darnay,* see section 4.2) interacts with it: being named Darnay should be directly relevant to being a condemned prisoner. The same issue does not arise with *I*, as all condemned prisoners can also be speakers in principle.

(94).[35] The VP interpreted as in (95) can thus be copied into the ellipsis site to give rise to the supersloppy reading in (93). Note that the context c of LOC, unlike INTER (see discussion at the end of section 3.3), cannot be fixed to the context of the first utterance in (93)a to trigger a supersloppy reading in (93)b, but has to remain a variable.

(94) $[[\text{LOC}]]^{c,g} = \lambda x. \lambda y.$ y is the location of x
     where $x = s_c$ and $y = l_c$

(95) $\lambda x.$ x feel good in the LOC(x)

  Similarly, time indexicals like *now* can be interpreted as being dependent on the discourse participants instead of being directly dependent on the context: examples like (96) were rated like examples like (29)-(30) (p=0.07) (cf. Bevington 1998: 222).

(96) *Ian has just defended his dissertation. Cristina is looking for a job.*
 a. *(Ian sending a text message to Cristina on Tuesday)* "I am celebrating right now."
 b. *(Cristina replying to Ian on Saturday)* "I am, too."
 Intended interpretation: I am celebrating right now, too (=Cristina is celebrating on
 Saturday).   [condition mean: 4.39; SD: 1.78]

The time indexical *now* can thus be rewritten as an e-type pronoun involving the indexical function TIME defined in (97), which relates the speaker s of the context c to her time t.[36] The supersloppy reading in (96) derives from copying the VP interpreted as in (98) into the ellipsis site.

(97) $[[\text{TIME}]]^{c,g} = \lambda x. \lambda y.$ y is the time of x
     where $x = s_c$ and $y = t_c$

(98) $\lambda x.$ x be celebrating at the TIME(x)

  Note that these two types of examples further show that e-type pronouns are not necessarily person pronouns (denoting individuals), but can also be adverbials (denoting circumstances). This has been observed for non-indexicals as well (Haïk 1985, i.a.):

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[35] The $\langle e,e\rangle$ variant of LOC is LOC(c)={$\langle c(s), c(l)\rangle$} (cf. fn. 20).
[36] The $\langle e,e\rangle$ variant of TIME is TIME(c)={$\langle c(s), c(t)\rangle$} (cf. fn. 35). I leave for future work the detailed investigation of other time indexicals like *today* or *tomorrow*. It would also be worth further exploring which other relations can be used in e-type construals of indexicals, e.g. to test whether time indexicals must be defined with respect to discourse participants or whether they can also be defined in relation to each other. More generally, the existence of four contextual parameters (speaker, addressee, location, time) can in principle create many possible relations between them. It would be interesting to check which ones are in fact used in e-type readings of indexicals and to understand why.

(99) John is bored in his office, but Tom is happy <u>there</u>. (=in his own office)

Haïk 1985: (6)

(100) Mary was a student {when she was twenty/in her twenties}, and Emily was a comedian <u>then</u>. (=in her own twenties)   *Haïk 1985: (7)*

4.1.2. Demonstratives

Like other indexicals, demonstratives exhibit supersloppy readings illustrated in (101)-(102).

(101) *Chris and Jane are each tasting a different wine.*
   a. *(Jane to Chris)* "I like this wine."
   b. *(Chris to Jane)* "I do, too."
   Intended interpretation: I like this wine, too (=Chris likes the wine he is tasting).
                             [condition mean: 5.15; SD: 1.32]

(102) *Chris and Jane are each drinking a different type of wine.*
   a. *(Jane to Chris)* "You really like that wine!"
   b. *(Chris to Jane)* "Don't you?"
   Intended interpretation: Don't you really like that wine? (=Doesn't Jane really like the wine she is tasting?)   [condition mean: 4.90; SD: 1.69]

Examples like (101), which are comparable in their scores (p=0.81) to examples like (29) (cf. Bevington 1998: 218), show that the demonstrative *this* can be interpreted as dependent on *I*. Contrary to Bevington's (1998: 219) claim, the demonstrative *that* can similarly be defined in relation to *you*: the supersloppy interpretation is as available in (102) as in (30) (p=0.39).

It has already been observed that demonstratives are not purely indexical in the Kaplanian sense, but can be bound and can have a descriptive meaning (Nunberg 1993, Elbourne 2008, i.a.). But just as in the case of person indexicals, the specificity of examples (101)-(102) lies in the fact that the descriptive component is based on the intrinsic meaning of demonstratives – not just on the pragmatic conditions. Thus, (101) shows that *this* can be interpreted based on the relation between the referent of the demonstrative and the speaker of the context that is determined by its intrinsic meaning. Traditional grammars indeed consider the referent of *this* (proximal demonstrative) to be near the speaker, namely located in her space, and the referent of *that* (distal demonstrative) to be distant from the speaker, namely located in the addressee's space. Accordingly, (101) suggests that *this* can

be rewritten as an e-type pronoun based on the relations *proximal (λx.λy.y is near x*) or *space (λx.λy.y is in the space of x),* which relate the referent of *this* to the speaker of the context. (102) illustrates the second option for *that*, which is here construed as an e-type pronoun based on the relation *space (λx.λy.y is in the space of x)* between the referent of *that* and the addressee of the context. It would be worth further testing whether *that* can also be rewritten as an e-type pronoun based on the relation *distal (λx.λy.y is distant from x*) between the referent of *that* and the speaker.[37]

Unlike other indexicals, the hidden predicates involved in the e-type construal of demonstratives do not relate two coordinates of the context, but an object of the world and a coordinate of the context, which is potentially more challenging for the Kaplanian theory. A full exploration of this type of examples could therefore be very informative for both the theory of demonstratives and that of indexicals. At this stage, this remains beyond the scope of this paper.

All these cases involving time and location indexicals, as well as demonstratives, thus show that supersloppy readings are not restricted to configurations involving *I* and *you*: the various types of dependencies between the different elements of the context can give rise to various types of supersloppy readings. An exhaustive investigation of all possible relations between indexicals is left for further research.

4.2. Proper names

We have just seen that the reciprocal relation between the two discourse participants of the context is not the only one that can trigger supersloppy readings: other relations between other context coordinates also can. Conversely, we can wonder whether other types of reciprocal relations, namely reciprocal relations between non-indexicals, are also relevant

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[37] Furthermore, *this* and *that* can be understood as being dependent on each other: examples like (xiii) below are as acceptable as examples (29)-(30) (p=0.09). This could suggest a more general pattern where indexicals cannot only be defined in relation to *I* or *you*, but to any other indexical. See fn. 36.

 (xiii) *Andrea and Karly are two sisters who are shopping together in a department store. They are each trying on a different dress and looking at two different hats on the rack.*
   a. *(Andrea to Karly)* "This dress would go well with that hat."
   b. *(Karly to Andrea)* "This dress would, too."
   Intended interpretation: This dress would go well with that hat, too (=The dress Karly is trying on would go well with the hat at which she is looking).   [condition mean: 5.47; SD: 1.37]

in VP-ellipsis. The results of the questionnaire reveal that they are, to some extent: supersloppy readings involving proper names are not as accessible as those involving *I* and *you* (p=0.05), but they are more acceptable than impossible readings like (38)-(39) (p<0.001).

(103) *Tess and Sean are talking about their colleagues.*
   a. *(Tess to Sean)* "Matthew owes Clarissa."
   b. *(Sean to Tess)* "Clarissa does, too."
   Intended interpretation: Clarissa owes Matthew, too.

   [condition mean: 4.46; SD: 1.76]

This implies that proper names, like e-type pronouns, can depend on the assignment function g and be construed as descriptions containing a bound variable. The e-type function used in (103) is the non-indexical reciprocal function OTHER defined in (104): OTHER has a domain contextually restricted to two individuals, and it relates one individual to the other one.[38]

(104) $[[\text{OTHER}]]^{c,g} = \lambda x. \lambda y.$ y is other than x
       where x and y $\in$ {g(1), g(2)}

The reading in (103) is thus derived from copying the VP interpreted as in (105) into the ellipsis site.

(105) $\lambda x.$ x owe the OTHER(x)

The function OTHER is a non-indexical variant of the function INTER.[39] Consequently, supersloppy readings can involve either two indexicals or two non-indexicals, but not a mixture of indexicals and non-indexicals: just as indexicals cannot be construed as depending on a proper name as shown by (56) above, proper names cannot be construed as depending on an indexical as shown in 0 below (p=0.94) (*pace* Chung 2000); both types of examples are significantly more degraded than examples involving two

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[38] The <e,e> variant of OTHER is OTHER(g)={<g(1), g(2)>, <g(2), g(1)>} (cf. fn. 36). Note that Safir (1996) likewise assumes the existence of a function OTHER to account for reciprocals across languages.

[39] The non-indexicality of proper names also implies that there should be more variation in their e-type construals if the pragmatic conditions allow it (i.e. other contextually salient functions than OTHER should be able to be used). This is a topic for further research: for my purposes, it is only relevant to examine the non-indexical counterpart of the function INTER.

proper names like (103) (p=0.01) or basic examples of supersloppy readings like (29)-(30) (p<0.001).

(106) *Keiko and Okiwa are talking about their boyfriends Nagi and Yoshi.*
   a. *(Keiko to Okiwa about her boyfriend Nagi)* "I like it when Nagi drives the car."
   b. *(Okiwa to Keiko)* "I do, too."
   Intended interpretation: I like it, too, when Yoshi drives the car. (=Okiwa likes it, too, when her boyfriend Yoshi drives the car)

[condition mean: 3.53; SD: 1.81]

The reason why supersloppy readings involving two proper names like (103) remain harder to obtain than basic cases of supersloppy readings with *I* and *you* like (29)-(30) is that while the domain of INTER is given as long as the context includes a speaker and an addressee, the domain restriction of OTHER to two individuals requires heavier pragmatic conditions that can make salient a reciprocal relation between two individuals.

Just as basic cases of supersloppy readings challenge the direct reference theory of indexicals, readings like (103) have the potential to challenge referential theories of proper names (Kripke's 1972 rigidity thesis, i.a.): they provide a new argument for the description theory of names famously introduced by Frege and more recently revived by Geurts (1997), among others, on the basis of examples like (107).

(107) If a child is christened 'Bambi', and Disney Inc. hear about it, then they will sue Bambi's parents.   *Geurts 1997: (7a)*

In this sentence, the second occurrence of *Bambi* has a bound variable use: this suggests that *Bambi* is similar to an e-type pronoun and can be construed as the description *the individual named x*, where x is bound by the first occurrence of *Bambi*.

Examples like (103) similarly support the hypothesis that proper names can be interpreted as bound descriptions. They further show that the description does not have to be *the individual named x*, but can be contextually constructed. This latter point is corroborated by a different type of case involving attitude contexts. In his solution to Quine's (1956) problem of the double vision scenario, Kaplan (1968) basically proposes that proper names can be construed as descriptions under which the attitude holder is acquainted with their referent: Ortcutt is interpreted as *the man in the brown hat* in (108)a, but as *the man with grey hair on the beach* in (108)b; that's why the two sentences are not

contradictory, given that Ralph is not aware of the fact that what he perceived as two men are in fact one and the same man.

(108) a. Ralph believes that Ortcutt is a spy.
    b. Ralph believes that Ortcutt is not a spy.

Quine (1956), Kaplan (1968)

In sum, examples like (103) promise to have similar consequences on the theory of proper names than the supersloppy readings investigated in this paper have on the theory of indexicals. Further exploring these consequences goes beyond the scope of this article.

4.3. Focus constructions

All examples with supersloppy readings that we have examined so far involve VP-ellipsis. Can supersloppy readings arise in other types of construction?

Focus constructions involving particles such as *only* or *even* are obvious candidates, given that ellipsis is also considered to involve focus (Rooth 1992, Heim 1997, Merchant 2001, i.a.) and sloppy readings of indexicals have mainly been observed in this type of constructions as seen in section 2.1. Relevant sentences and interpretations are illustrated in (109)-(110).

(109) *Tom is talking to his partner Sue in a ballroom dancing class involving ten other couples.*
(Tom to Sue) "Only I didn't make you fall over."
Intended interpretation: All the other dancers made their partner fall over.

(110) *Sue is talking to her partner Tom in a ballroom dancing class involving ten other couples.*
(Sue to Tom) "Only you made me swirl."
Intended interpretation: No other dancer made their partner swirl.

[condition mean for (109)-(110): 4; SD: 2.27]

But the empirical properties of this type of examples revealed by the questionnaire show that they should not be analyzed in the same way as cases of supersloppy readings in VP-ellipsis like (29)-(30). First, examples like (109)-(110) received significantly lower scores ($p<0.001$) than their counterparts in ellipsis contexts like (29)-(30). Second, examples such as (109)-(110) were rated like examples such as (111) below ($p=0.15$), which involve two proper names instead of two indexicals. Recall that the same does not

hold in ellipsis contexts: we found a significant contrast between examples like (29)-(30) (with two indexicals) and those like (103) (with two proper names).

(111) *The teacher Paul is talking to his wife about the dancers of his ballroom dance class. (Paul to his wife)* "Only Tom made Sue swirl."
Intended interpretation: The other dancers in the class did not make their partner swirl.   [condition mean: 4.53; SD: 1.67]

It seems therefore more appropriate to analyze both types of examples ((109)-(110) and (111)) in the same way and treat them as cases of complex focus like (112) below (cf. Krifka 1991, i.a.). In fact, native speakers often report that they need to stress the two indexicals in (109)-(110), just as they need to stress the two proper names in (111)[40] or (112).

(112) John only introduced Bill$_F$ to Sue$_F$.   *Krifka (1991: 21)*

Under this analysis, the two indexicals in (109)-(110), just like the two proper names in (111) or (112), are associated with the same focus operator. (112) thus means that the only pair <x, y> such that John introduced x to y is <Bill, Sue>; similarly, (110) means that the only pair <x,y> such that x made y swirl is <Tom, Sue>. The fact that the alternative pairs are understood as being restricted to the set of dance partners in the class requires rich contextual conditions. That's why this type of example is a bit degraded (e.g. as mentioned above, it is less acceptable than standard examples of supersloppy readings): this pragmatic work is costly. Note that the same analysis is applied by Hedberg (2013) to vice versa clefts such as (113).[41]

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[40] Interestingly, the acceptability of examples like (111) suggests that even if adnominal *only* can only associate with the nominal it is adjoined to in simple cases, it can also associate with another nominal in complex focus cases. See Jacobson (2012: 27) for discussion about this.

[41] Obviously, this analysis cannot conversely be applied (instead of the e-type analysis) to cases of supersloppy readings in VP-ellipsis. First, the complex focus analysis for examples involving focus particles is precisely motivated by the empirical differences between these examples and examples of supersloppy readings in ellipsis; therefore, they should not be analyzed in the same way. Second, complex focus requires focal stress on the two indexicals, which is incompatible with ellipsis: complex focus in ellipsis requires gapping, as illustrated in (xiv).

(xiv) SPEAKER A: I shall miss you.
SPEAKER B: and I you.   *Sag et al. 1985: (114)*

Note that this predicts that gapping examples like (xiv) should behave like examples (109)-(110) and not like examples (29)-(30). In particular, they should not require c-command nor disallow mixing of indexicals and non-indexicals. I leave the systematic testing of these data for further research.

(113) "*Anna*: So, what's the case you're working on?   [General Hospital, ABC, 6/21/89]
         Robert: Nothing I need bother you with now. It's YOU who called ME, remember?"
                                                                    Hedberg 2013: (32)

The complex focus analysis makes two additional correct predictions. First, it predicts that unlike cases of supersloppy readings in ellipsis (see sections 3.2-3.3), examples like (109)-(110) do not require the presence of two indexicals, since the interpretation does not rely on the specific dependency between discourse participants as such, but on the contextually determined relation between the individuals denoted by the indexicals. In fact, examples like (114)-(115) were rated like examples (109)-(110) ($p=0.24$).[42]

(114) *Sue is complaining to Paul, the ballroom dancing teacher, about her partner Tom.*
       (Sue to Paul) "Only Tom made me fall."
       Intended interpretation: No other dancer in the class made their partner fall.

(115) *Paul, the ballroom dancing teacher, is praising Sue's partner Tom.*
       (Paul to Sue) "Only Tom made you swirl."
       Intended interpretation: No other dancer in the class made their partner swirl.
                                        [condition mean for (114)-(115): 3.77; SD: 1.77]

Second, the complex focus analysis, unlike the indexical e-type analysis, predicts that binding of the second indexical by the first one is not required for the reading in examples (109)-(110) to obtain, since both indexicals simply need to be independently bound by the focus operator. Examples like (116)-(117), where the second indexical is not c-commanded by the first one, show that this is borne out: they are comparable in scores to (109)-(110) ($p=0.051$), contrary to what we observed in the case of supersloppy readings (see section 3.2).

(116) *Karen and her 10 colleagues are researchers at NIH. They are each responsible for giving a pill to a participant chosen at random from 11 participants. Participants may be selected once, more than once, or not at all.*
       (Karen talking with her participant) "Only the pill I gave didn't harm you."
       Intended interpretation: All the other pills given by Karen's colleagues harmed their participants.

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[42] This implies that example (16) (see section 1.2) should become acceptable if *me* receives focal stress. This also implies that example (59) (see section 3.3) is in fact expected to be acceptable as long as *we* is focused. Jacobson (2012) presumably intends to use the same prosody in both examples (without focus on e-type pronouns). But given the complexity of this type of examples, prosody would need to be carefully controlled for before drawing any conclusion.

(117) *For Father's Day, Carla and her friends have prepared gifts for their fathers.*
(Carla's father talking to Carla) "Only the gift you made made me laugh."
Intended interpretation: The gifts made by Carla's friends did not make their fathers
laugh.

[condition mean for (116)-(117): 3.5; SD: 1.71]

In sum, the empirical properties of these readings support the hypothesis that they are not
instances of supersloppy readings, but of complex focus. This may explain why Rebuschi
(1994, 1997), Bevington (1998) and Chung (2000) did not discuss or even mention them.

Furthermore, the complex focus hypothesis is theoretically superior to the indexical
e-type hypothesis for analyzing examples like (109)-(110). While complex focus is
independently required to account for other types of examples, applying the indexical e-
type analysis to (109)-(110) would require using a monstrous variant of *only* that can
quantify over contexts, such as that defined in (118), and abandoning fixing the context of
INTER, which excludes a class of apparently impossible readings (as discussed at the end
of section 3.3). (109) would thus be analyzed as in (119).[43]

(118) *Monstrous* only *(C is a set of pragmatically determined focus alternatives q; K is the
set of pragmatically relevant contexts c)*
$[[only]]^{c,w} = \lambda K.\lambda C.\lambda c^*.\lambda p.\ p(w)(c^*) = 1 \wedge \forall q \in C, \forall c \in K, [q(w)(c) \rightarrow p \subseteq q\ \&\ c=c^*]$

(119) *(Context c*: Tom to Sue, in a ballroom dancing class)*
$[[only\ I\ didn't\ make\ you\ fall\ over]]^c = \forall c\ [s_c\ did\ not\ make\ INTER_c(s)\ fall\ over \rightarrow c=c^*]$

Moreover, this monstrous version of *only* would run the risk of overgenerating if
used in cases other than supersloppy readings. For instance, if we let the focus alternatives
to a focused name be the set of all individual characters, a sentence like (120)a would mean
that there is exactly one individual character such that the content of that character in the
actual context is met by Sue. This would wrongly predict a continuation like (120)b, among
others, to be felicitous.

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(120) a. (*Paul to his wife*) Tom only made Sue$_F$ swirl.
　　　b. (*Paul's wife to Sue*) #No, that's not true, Tom made you swirl too.

　　　There is one type of case, however, that does not require quantification over context under the e-type construal: it is illustrated in (121)-(122) below.[44]

(121) *Samantha is on the phone with her mother.*
　　　(Samantha's mother to Samantha) "Only I call you regularly."
　　　Intended interpretation: You don't call me regularly (=Samantha doesn't call her mother regularly).

(122) *Samantha is on the phone with her mother.*
　　　(Samantha to her mother) "Only you call me regularly."
　　　Intended interpretation: I don't call you regularly (=Samantha doesn't call her mother regularly).
　　　　　　　　　　　　　　　　　　　　[condition mean for (121)-(122): 2.65; SD: 1.54]

In that case, the two alternative individuals (Samantha and her mother) belong to the same context (as speaker or addressee), so that the e-type construal of *you* (in (121)) or *me* (in (122)) does not require abandoning fixing the context of INTER or adopting a monstrous variant of *only*. Under the hypothesis adopted in this paper that person presuppositions are ignored in focus alternatives (see sections 3.1 and 3.5), both examples (121) and (122) are predicted to be acceptable even in the absence of complex focus, namely if *you* in (121) and *me* in (122) do not bear focal stress. The denotation of the VPs in the focus alternatives are given in (123), where the definition of INTER licenses both speaker and addressee as possible values for x.

(123) a. Only I [$_{VP}$ call you regularly].
　　　　　$[\![\text{VP}]\!]^{\text{FOC}} = \lambda\text{x. x call the INTER(x) regularly}$
　　　b. Only you [$_{VP}$ call me regularly].
　　　　　$[\![\text{VP}]\!]^{\text{FOC}} = \lambda\text{x. x call the INTER(x) regularly}$

In view of these predictions, the results of the questionnaire could appear to be surprising: examples (121)-(122) turn out to be significantly degraded ($p<0.001$) as compared to examples (109)-(110). Yet, given that prosody was not controlled for in the (written) questionnaire, they should be grammatical under not just one, but two construals (namely, under the complex focus interpretation and under the supersloppy interpretation).

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[44] Thanks to an anonymous reviewer for pointing out the importance of this case.

However, we could argue that this very ambiguity may well be responsible for the relative deviance of these examples: it is not only necessary to exclude the strict reading, but also the complex focus reading to get the supersloppy reading in (121)-(122). Furthermore, to get the relevant interpretation in (121)-(122) under the complex focus construal, the alternatives must be restricted to only involve the interlocutors of the context, which requires a lot of pragmatic work.

The prediction above would therefore require further empirical testing. One possibility would be to control for prosody in examples like (121)-(122) by using oral questionnaires. Another possibility would be to examine such readings in languages with indexical clitics, which cannot bear focal stress. For instance, French examples like (124) would be predicted to only license the interpretation in (b), not that in (a). I leave these questions open for further research.

(124)   *Seul moi te   fais   tourner.*
         only   I   you_clitic   make   swirl
         "Only I make you swirl."
         a. Intended interpretation: the other dancers in the class do not make their partners swirl.
         b. Intended interpretation: you don't make me swirl.

Finally, recall that an alternative hypothesis was discussed in section 3.5, according to which person presuppositions in fact persist in focus alternatives, and their asymmetrical definition gives rise to asymmetrical predictions in supersloppy readings involving person reversal (see (73) vs. (75)). As shown in (125), this hypothesis predicts a contrast between (121), which should be acceptable, and (122), which should not.

(125)a. Only I_i [$_{VP}$ call you regularly].
         $[[VP]]^{FOC} = \lambda x.$ x call the INTER(x) regularly; presupposition: the INTER(x) is a discourse participant in c
     b. *Only you_i [$_{VP}$ call me regularly].
         $[[VP]]^{FOC} = \lambda x.$ x call the INTER(x) regularly; presupposition: the INTER(x) is the speaker in c

Interestingly, this prediction seems to be supported by the results of the questionnaire, which reveal a significant contrast (p=0.003) between examples like (121) (condition mean: 3.14) and examples like (122) (condition mean: 2.14). Given the issues discussed

above, this conclusion nevertheless remains tentative, and this question should be added to future studies controlling for the prosody of examples like (121)-(122).

5. Conclusion

Supersloppy readings thus provide a new empirical argument challenging the fixity theory of indexicals as specified by Kaplan (1977/1989): not only do they confirm the potentiality of indexicals to be bound, they also show that the descriptive meaning of indexicals can in fact affect the interpretation of sentences – at the level of character, if not at the level of intension.

The availability of supersloppy readings indeed reveals the existence of various types of dependencies between the contextual parameters that can be used in their interpretation: speaker and addressee, as well as their time and location, are not necessarily understood as directly depending on the context, they can also be construed as depending on each other.

Supersloppy readings have therefore important consequences on the understanding of indexicals. They also affect other aspects of linguistic theory. In particular, these readings and their like bring to the fore new kinds of e-type construals, which concern other categories than the run-of-the-mill third-person pronouns and may shed new light on them: not only first- and second-person pronouns, which have been considered to be resistant to such construals, but also location and time adverbials, demonstratives, as well as proper names, can be interpreted as e-type pronouns. These readings also show that the hidden description used in e-type construals does not necessarily have to be linguistically present in the context, thus potentially adding a new element in the debate about the formal link issue.

All these theoretical consequences thus justified going beyond the subtlety and instability of informally collected judgments about supersloppy readings and systematically testing their availability on the basis of an online large-scale questionnaire. These readings may be supersloppy – they robustly exist and obey strict constraints, which are very informative.

Acknowledgements

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Appendix

Below is included the list of stimuli used in the experiment described in section 2.3. Each condition is briefly specified in the underlined heading, and for every target sentence, the intended interpretation is in bold. Recall that (28) above shows how the discourse was presented in the actual experiment.

ELLIPSIS CONDITIONS

I + you, pragmatic conditions satisfied

Paul and Julie are lovers.
(Paul to Julie) "I adore you."
(Julie to Paul) "I do, too."
I adore you, too (=Julie adores Paul).

Paul and Julie are lovers and like joking.
(Paul to Julie) "I adore you."
(Julie to Paul) "I do, too."
I adore myself, too (=Julie adores Julie).

Rocky and Mac are friends who often do nice things for each other.
(Rocky to Mac) "I owe you."
(Mac to Rocky) "I do, too."
I owe you, too (=Mac owes Rocky).

Rocky and Mac are friends who often do nice things for each other and enjoy joking with one another.
(Rocky to Mac) "I owe you."
(Mac to Rocky) "I do, too."
I owe myself, too (=Mac owes Mac).

Kristen and Kyle are friends shopping in a department store with mirrors.
(Kristen to Kyle) "I see you."
(Kyle to Kristen) "I do, too."
I see you, too (=Kyle sees Kristen).

Kristen and Kyle are friends shopping in a department store with mirrors.
 (Kristen to Kyle) "I see you."
(Kyle to Kristen) "I do, too."
I see myself, too (=Kyle sees Kyle).

You + me, pragmatic conditions satisfied

Lucy is arguing with her mother.
(Lucy to her mother) "You don't understand me."
(the mother to Lucy) "You don't either."
You don't understand me either (=Lucy does not understand Lucy's mother).

Lucy is arguing with her mother.
(Lucy to her mother) "You don't understand me."
(the mother to Lucy) "You don't either."
You don't understand yourself either (=Lucy does not understand Lucy).

Kristen is talking to her husband, Ben.
(Kristen to Ben) "You love me."
(Ben to Kristen) "Do you?"
Do you love me? (=Does Kristen love Ben?)

Kristen is talking to her husband, Ben.
(Kristen to Ben) "You love me."
(Ben to Kristen) "Do you?"
Do you love yourself? (=Does Kristen love Kristen?)

Sarah is talking to her friend Judy. They are in a department store, standing in front of a dirty mirror.
(Sarah to Judy) "You don't see me."
(Judy to Sarah) "You don't either."
You don't see me either (=Sarah does not see Judy).

Sarah is talking to her friend Judy. They are in a department store, standing in front of a dirty mirror.
(Sarah to Judy) "You don't see me."
(Judy to Sarah) "You don't either."
You don't see yourself either (=Sarah does not see Sarah).

I + your, pragmatic conditions satisfied

Paul and Julie are lovers.
(Paul to Julie) "I love your hair."
(Julie to Paul) "I do, too."
I love your hair, too (=Julie loves Paul's hair).

Paul and Julie are lovers.
(Paul to Julie) "I love your hair."
(Julie to Paul) "I do, too."
I love my hair, too (=Julie loves Julie's hair).

Rocky and Mac are having a fight.
(Rocky to Mac) "I hate your attitude."
(Mac to Rocky) "I do, too."
I hate your attitude, too (=Mac hates Rocky's attitude).

Rocky and Mac are having a fight.
(Rocky to Mac) "I hate your attitude."
(Mac to Rocky) "I do, too."
I hate my attitude, too (=Mac hates Mac's attitude).

Kristen and her friend Kyle are chatting via Skype.
(Kristen to Kyle) "I cannot hear your voice."
(Kyle to Kristen) "I cannot either."
I cannot hear your voice, either (=Kyle cannot hear Kristen's voice).

Kristen and her friend Kyle are chatting via Skype.
(Kristen to Kyle) "I cannot hear your voice."
(Kyle to Kristen) "I cannot either."
I cannot hear my voice, either (=Kyle cannot hear Kyle's voice).

You + my, pragmatic conditions satisfied

Lucy is arguing with her mother.
(Lucy to her mother) "You don't understand my situation."
(the mother to Lucy) "You don't either."
You don't understand my situation either (=Lucy does not understand Lucy's mother's situation).

Lucy is arguing with her mother.
(Lucy to her mother) "You don't understand my situation."
(the mother to Lucy) "You don't either."
You don't understand your situation either (=Lucy does not understand Lucy's situation).

Kristen is talking to her husband, Ben.
(Kristen to Ben) "You ignored my feelings."
(Ben to Kristen) "Didn't you?"
Didn't you ignore my feelings? (=Didn't Kristen ignore Ben's feelings?)

Kristen is talking to her husband, Ben.
(Kristen to Ben) "You ignored my feelings."
(Ben to Kristen) "Didn't you?"
Didn't you ignore your feelings? (=Didn't Kristen ignore Kristen's feelings?)

Deborah and her friend Robert are talking via Skype.
(Deborah to Robert) "Can you see my video?"
(Robert to Deborah) "Can you?"
Can you see my video? (=can Deborah see Robert's video?)

Deborah and her friend Robert are talking via Skype.
(Deborah to Robert) "Can you see my video?"
(Robert to Deborah) "Can you?"
Can you see your video? (=can Deborah see Deborah's video?).

I + you, pragmatic conditions not satisfied

Claire is talking to a neighbor.
(Claire to the neighbor) "I saw you at the library yesterday."
(the neighbor to Claire) "I did, too."
I saw you at the library yesterday, too (=the neighbor saw Claire at the library yesterday).

Claire is talking to a neighbor.
(Claire to the neighbor) "I saw you at the library yesterday."
(the neighbor to Claire) "I did, too."
I saw myself at the library yesterday, too (=the neighbor saw the neighbor at the library yesterday).

Emma is talking to an acquaintance in the film industry.
(Emma to Sebastian) "I heard you on the radio a few weeks ago."
(Sebastian to Emma) "I did, too."
I heard you on the radio a few weeks ago, too (=Sebastian heard Emma on the radio a few weeks ago).

Emma is talking to an acquaintance in the film industry.
(Emma to Sebastian) "I heard you on the radio a few weeks ago."
(Sebastian to Emma) "I did, too."
I heard myself on the radio a few weeks ago, too (=Sebastian heard Sebastian on the radio a few weeks ago).

Ben is talking to a fellow musician in his department.
(Ben to Ariel) "I will listen to you tomorrow."
(Ariel to Ben) "I will, too."
I will listen to you tomorrow, too (=Ariel will listen to Ben tomorrow).

Ben is talking to a fellow musician in his department.
(Ben to Ariel) "I will listen to you tomorrow."
(Ariel to Ben) "I will, too."
I will listen to myself tomorrow, too (=Ariel will listen to Ariel tomorrow).

You + me, pragmatic conditions not satisfied

Robert is talking to a neighbor.
(Robert to the neighbor) "Did you see me at the movie theater yesterday?"
(the neighbor to Robert) "Did you?"
Did you see me at the movie theater yesterday? (=did Robert see the neighbor at the movie theater yesterday?)

Robert is talking to a neighbor.
(Robert to the neighbor) "Did you see me at the movie theater yesterday?"
(the neighbor to Robert) "Did you?"
Did you see yourself at the movie theater yesterday? (=did Robert see Robert at the movie theater yesterday?)

June is talking to the cashier.
(June to the cashier) "Could you wait for me one second?"
(the cashier to June) "Could you?"
Could you wait for me one second? (=could June wait for the cashier one second?)

June is talking to the cashier.
(June to the cashier) "Could you wait for me one second?"
(the cashier to June) "Could you?"
Could you wait for yourself one second? (=could June wait for June one second?)

Michael is talking to a stranger on the train.
(Michael to the stranger) "Could you help me?"
(the stranger to Michael) "Could you?"
Could you help me? (=could Michael help the stranger?)

Michael is talking to a stranger on the train.
(Michael to the stranger) "Could you help me?"
(the stranger to Michael) "Could you?"
Could you help yourself? (=could Michael help Michael?)

I + your, pragmatic conditions not satisfied

Claire is talking to a neighbor.
(Claire to the neighbor) "I came across your daughter yesterday."
(the neighbor to Claire) "I did, too."
I came across your daughter yesterday, too (=the neighbor came across Claire's daughter).

Claire is talking to a neighbor.
 (Claire to the neighbor) "I came across your daughter yesterday."
(the neighbor to Claire) "I did, too."
I came across my daughter yesterday, too (=the neighbor came across the neighbor's daughter).

Emma is talking to an acquaintance in the film industry.
(Emma to Sebastian) "I saw your movie at the film festival."
(Sebastian to Emma) "I did, too."
I saw your movie at the film festival, too (=Sebastian saw Emma's film).

Emma is talking to an acquaintance in the film industry.
(Emma to Sebastian) "I saw your movie at the film festival."
(Sebastian to Emma) "I did, too."
I saw my movie at the film festival, too (=Sebastian saw Sebastian's film).

Ben is talking to a fellow musician in his department.
(Ben to Ariel) "I added a few measures to your composition."
(Ariel to Ben) "I did, too."
I added a few measures to your composition, too (=Ariel added a few measures to Ben's composition).

Ben is talking to a fellow musician in his department.
(Ben to Ariel) "I added a few measures to your composition."
(Ariel to Ben) "I did, too."
I added a few measures to my composition, too (=Ariel added a few measures to Ariel's composition).

You + my, pragmatic conditions not satisfied

Robert is talking to a neighbor, who is as keen on cars as he is.
(Robert to the neighbor) "Do you like my new car?"
(the neighbor to Robert) "Do you?"
Do you like my new car (=does Robert like the neighbor's new car)?

Robert is talking to a neighbor, who is as keen on cars as he is.
(Robert to the neighbor) "Do you like my new car?"
(the neighbor to Robert) "Do you?"
Do you like your new car (=does Robert like Robert's new car)?

June is talking to her neighbor – they both have gardens and share with each other.
(June to the neighbor) "You don't eat my vegetables."
(the neighbor to June) "You don't either."
You don't eat my vegetables (=June doesn't eat the neighbor's vegetables).

June is talking to her neighbor – they both have gardens and share with each other.
(June to the neighbor) "You don't eat my vegetables."
(the neighbor to June) "You don't either."
You don't eat your vegetables. (=June doesn't eat June's vegetables).

Michael is talking to his neighbor about the tornado that damaged houses in their neighborhood.
(Michael to the neighbor) "You don't see my house."
(the neighbor to Michael) "You don't either."
You don't see my house (=Michael doesn't see the neighbor's house).

Michael is talking to his neighbor about the tornado that damaged houses in their neighborhood.
(Michael to the neighbor) "You don't see my house."
(the neighbor to Michael) "You don't either."
You don't see your house (=Michael doesn't see Michael's house).

I + you and proper name

Chris is talking to his children Lucy and Mary (who live in London and in Venice, respectively) via Skype.
(Chris to Lucy) "Now I can see you and Mary."
(Lucy to Chris) "I can, too."
I can see you and Mary, too (=Lucy can see Chris and Mary).

Chris is talking to his children Lucy and Mary (who live in London and in Venice, respectively) via Skype.
(Chris to Lucy) "Now I can see you and Mary."
(Lucy to Chris) "I can, too."
I can see myself and Mary, too (=Lucy can see Lucy and Mary).

Sonia is talking with her kids Oliver and Melissa before they go to bed.
(Sonia to Oliver) "I love both you and Melissa."
(Oliver to Sonia) "I do, too."
I love both you and Melissa, too (=Oliver loves both Sonia and Melissa).

Sonia is talking with her kids Oliver and Melissa before they go to bed.
(Sonia to Oliver) "I love both you and Melissa."
(Oliver to Sonia) "I do, too."
I love both myself and Melissa, too (=Oliver loves both Oliver and Melissa).

Rocky is friends with Mac, who is married to Julia. They often do nice things for each other.
(Rocky to Mac) "You know, I really owe you and Julia."
(Mac to Rocky) "Well, I do, too."
I owe you and Julia, too (=Mac owes Rocky and Julia).

Rocky is friends with Mac, who is married to Julia. They often do nice things for each other.
(Rocky to Mac) "You know, I really owe you and Julia."
(Mac to Rocky) "Well, I do, too."
I owe myself and Julia, too (=Mac owes Mac and Julia).

You + me and proper name

Chris is talking to his children Lucy and Mary (who live in London and in Venice, respectively) via Skype.
(Chris to Lucy) "Can you see me and Mary?"
(Lucy to Chris) "Can you?"
Can you see me and Mary, too? (=Can Chris see Lucy and Mary?)

Chris is talking to his children Lucy and Mary (who live in London and in Venice, respectively) via Skype.
(Chris to Lucy) "Can you see me and Mary?"
(Lucy to Chris) "Can you?"
Can you see yourself and Mary, too? (=Can Chris see Chris and Mary?)

Sonia is talking with her kids Oliver and Melissa before they go to bed.
(Oliver to his mother Sonia) "Do you love both me and Melissa?"
(Sonia to Oliver) "Of course! Do you?"
Do you love both me and Melissa? (=Does Oliver love both Sonia and Melissa?)

Sonia is talking with her kids Oliver and Melissa before they go to bed.
(Oliver to his mother Sonia) "Do you love both me and Melissa?"
(Sonia to Oliver) "Of course! Do you?"
Do you love both yourself and Melissa? (=Does Oliver love both Oliver and Melissa?)

Rocky is friends with Mac, who is married to Julia. They often do nice things for each other.
(Rocky to Mac) "You know, you really owe me and Julia."
(Mac to Rocky) "I know. You do, too."
You owe me and Julia, too (=Rocky owes Mac and Julia).

Rocky is friends with Mac, who is married to Julia. They often do nice things for each other.
(Rocky to Mac) "You know, you really owe me and Julia."
(Mac to Rocky) "I know. You do, too."
You owe yourself and Julia, too (=Rocky owes Rocky and Julia).

Reversal: *I + you*

Sam is talking to her friend Lynn about the previous day when they met at the market by chance.
(Sam to Lynn) "I noticed you before you did."
I noticed you before you noticed me (=Sam noticed Lynn before Lynn noticed Sam).

Sam is talking to her friend Lynn. They are watching a video of their dance performance.
(Sam to Lynn) "Here you are! I noticed you before you did."
I noticed you before you noticed yourself (=Sam noticed Lynn before Lynn noticed Lynn).

Jaime and Marija are pen pals (rebels for the cause of analog) lamenting over their increasingly digitalized world.
(Marija to Jaime) "I wrote you even when you did not."
I wrote you even when you did not write me. (=Marija wrote Jaime even when Jaime did not write Marija).

Jaime and Marija are friends discussing their written communication, including "self reminders."
(Marija to Jaime) "I wrote you even when you did not."
I wrote you even when you did not write yourself. (=Marija wrote Jaime even when Jaime did not write herself).

Sebastian and Emma are both performers and agents searching for new talent. They are also taking a yoga class together in which they are learning about self-reflection and "soul searching."
(Sebastian to Emma) "I found you before you did."
I found you before you found me (=Sebastian found Emma before Emma found Sebastian).

S*ebastian and Emma are both performers and agents searching for new talent. They are also taking a yoga class together in which they are learning about self-reflection and "soul searching."*
(Sebastian to Emma) "I found you before you did."
I found you before you found yourself (=Sebastian found Emma before Emma found herself).

Reversal: *you + me*

Carl is thanking his colleague.
(Carl to his colleague) "You helped me even when I did not."
You helped me even when I didn't help you (=Carl's colleague helped Carl even when Carl did not help Carl's colleague).

Carl is thanking his colleague.
(Carl to his colleague) "You helped me even when I did not."
You helped me even when I didn't help myself (=Carl's colleague helped Carl even when Carl did not help Carl).

Doug is talking to his friend about past issues in their relationship.
(Doug to his friend) "You liked me even when I did not."
You liked me even when I didn't like you (=Doug's friend liked Doug even when Doug did not like Doug's friend).

Doug is talking to his friend about past issues in their relationship.
(Doug to his friend) "You liked me even when I did not."
You liked me even when I didn't like myself (=Doug's friend liked Doug even when Doug did not like Doug).

Sue is talking to her kind coworker.
(Sue to her coworker) "You treated me before I did."
You treated me before I treated you (=Sue's coworker treated Sue before Sue treated Sue's coworker).

Sue is talking to her kind coworker.
(Sue to her coworker) "You treated me before I did."
You treated me before I treated myself (=Sue's coworker treated Sue before Sue treated Sue).

No c-command between *I* and *you*

Paul is talking to his sister Julie.
(Paul to Julie) "The man I hate loves you."
(Julie to Paul) "The woman I hate does not."
The woman I hate does not love you (=the woman Julie hates does not love Paul).

Paul is talking to his sister Julie.
(Paul to Julie) "The man I hate loves you."
(Julie to Paul) "The woman I hate does not."
The woman I hate does not love me (=the woman Julie hates does not love Julie).

Jeremy is talking to his colleague Jesse.
(Jeremy to Jesse) "The student I answered questions you."
(Jesse to Jeremy) "The student I answered does not."
The student I answered does not question you (=the student Jesse answered does not question Jeremy).

Jeremy is talking to his colleague Jesse.
(Jeremy to Jesse) "The student I answered questions you."
(Jesse to Jeremy) "The student I answered does not."
The student I answered does not question me (=the student Jesse answered does not question Jesse).

Deborah is talking to fellow police officer Robert.
(Deborah to Robert) "The woman I found threatens you."
(Robert to Deborah) "The man I found does not."
The man I found does not threaten you (=the man Robert found does not threaten Deborah).

Deborah is talking to fellow police officer Robert.
(Deborah to Robert) "The woman I found threatens you."
(Robert to Deborah) "The man I found does not."
The man I found does not threaten me (=the man Robert found does not threaten Robert).

No c-command between *you* and *me*

Paul is talking to his sister Julie.
(Paul to Julie) "The woman you hate loves me."
(Julie to Paul) "The man you hate does not."
The man you hate does not love me (=the man Paul hates does not love Julie).

Paul is talking to his sister Julie.
(Paul to Julie) "The woman you hate loves me."
(Julie to Paul) "The man you hate does not."
The man you hate does not love you (=the man Paul hates does not love Paul).

Amy is talking to her brother Joel.
(Amy to Joel) "The girl you like despises me."
(Joel to Amy) "The boy you like does, too."
The boy you like despises me, too (=the boy Amy likes despises Joel).

Amy is talking to her brother Joel.
(Amy to Joel) "The girl you like despises me."
(Joel to Amy) "The boy you like does, too."
The boy you like despises you (=the boy Amy likes despises Amy).

Ben is talking to his colleague Jesse.
(Ben to Jesse) "The student you pardon questions me."
(Jesse to Ben) "The student you pardon does not."
The student you pardon does not question me (=the student Ben pardons does not question Jesse).

Ben is talking to his colleague Jesse.
(Ben to Jesse) "The student you pardon questions me."
(Jesse to Ben) "The student you pardon does not."
The student you pardon does not question you (=the student Ben pardons does not question Ben).

I and *you* in different clauses (pragmatic conditions satisfied)

Sue and Tom are lovers.
(Sue to Tom) "I think the world would be a terrible place if you weren't in it."
(Tom to Sue) "I do, too."
I think that the world would be a terrible place if you weren't in it, too (=Tom thinks that the world would be a terrible place if Sue wasn't in it).

Sue and Tom are lovers and like joking.
(Sue to Tom) "I think the world would be a terrible place if you weren't in it."
(Tom to Sue) "I do, too."
I think that the world would be a terrible place if I wasn't in it, too (=Tom thinks that the world would be a terrible place if Tom wasn't in it).

Jay is talking to his girlfriend Susan on the phone.
(Jay to Susan) "I turn around whenever anyone passes by who looks like you."
(Susan to Jay) "I do, too!"
I turn around whenever anyone passes by who looks like you, too (=Susan turns around whenever anyone passes by who looks like Jay).

Jay is talking to his girlfriend Susan on the phone.
(Jay to Susan) "I turn around whenever anyone passes by who looks like you."
(Susan to Jay) "I do, too!"
I turn around whenever anyone passes by who looks like me, too (=Susan turns around whenever anyone passes by who looks like Susan).

Anne is arguing with her friend Kay.
(*Anne to Kay*) "Why would I believe anything you say?"
(*Kay to Anne*) "Why would I?"
Why would I believe anything you say? (=why would Kay believe anything Anne says?)

Anne is arguing with her friend Kay.
(*Anne to Kay*) "Why would I believe anything you say?"
(*Kay to Anne*) "Why would I?"
Why would I believe anything I say? (=why would Kay believe anything Kay says?)

You and *me* in different clauses (pragmatic conditions satisfied)

Jay is talking to his girlfriend Susan.
(Jay to Susan) "You don't know the first thing about the way I feel."
(Susan to Jay) "You don't, either."
You don't know the first thing about the way I feel, either (=Jay doesn't know the first thing about the way Susan feels).

Jay is talking to his girlfriend Susan.
(Jay to Susan) "You don't know the first thing about the way I feel."
(Susan to Jay) "You don't, either."
You don't know the first thing about the way you feel, either (=Jay doesn't know the first thing about the way Jay feels).

David is arguing with his sister Alice.
(David to Alice) "How dare you imply that the graduate program shouldn't have accepted me?"
(Alice to David) "How dare you?"
How dare you imply that the graduate program shouldn't have accepted me?
(=How dare David imply that the graduate program shouldn't have accepted Alice?)

David is arguing with his sister Alice.
(David to Alice) "How dare you imply that the graduate program shouldn't have accepted me?"
(Alice to David) "How dare you?"
How dare you imply that the graduate program shouldn't have accepted you?
(=How dare David imply that the graduate program shouldn't have accepted David?)

Diana is talking to her husband Jon.
(Diana to Jon) "Can you swear that nothing will happen to me?"
(Jon to Diana) "Can you?"
Can you swear that nothing will happen to me? (=Can Diana swear that nothing will happen to Jon?)

Diana is talking to her husband Jon.
(Diana to Jon) "Can you swear that nothing will happen to me?"
(Jon to Diana) "Can you?"
Can you swear that nothing will happen to you? (=Can Diana swear that nothing will happen to Diana?)

I and *you* in different clauses (intervener animate, pragmatic conditions not satisfied)

Tom is talking to his dance partner Sue about Paul, the ballroom dancing teacher.
(Tom to Sue) "I think that Paul hates you."
(Sue to Tom) "I do, too."
I think that Paul hates you, too (=Sue thinks that Paul hates Tom).

Tom is talking to his dance partner Sue about Paul, the ballroom dancing teacher.
(Tom to Sue) "I think that Paul hates you."
(Sue to Tom) "I do, too."
I think that Paul hates me, too (=Sue thinks that Paul hates Sue).

Milie is talking to her sister Adiba about her groom, Rupam.
 (Milie to Adiba) "I believe that Rupam praised you."
(Adiba to Milie) "I do, too."
I believe that Rupam praised you, too (=Adiba believes that Rupam praised Milie).

Milie is talking to her sister Adiba about her groom, Rupam.
(Milie to Adiba) "I believe that Rupam praised you."
(Adiba to Milie) "I do, too."
I believe that Rupam praised me, too (=Adiba believes that Rupam praised Adiba).

Anne is talking to her friend Kay about Kay's recent romantic life gone awry.
 (Anne to Kay) "I heard that Matt refused you."
(Kay to Anne) "I did, too."
I heard that Matt refused you, too (=Kay heard that Matt refused Anne).

Anne is talking to her friend Kay about Kay's recent romantic life gone awry.
(Anne to Kay) "I heard that Matt refused you."
(Kay to Anne) "I did, too."
I heard that Matt refused me, too (=Kay heard that Matt refused Kay).

You and *me* in different clauses (intervener animate, pragmatic conditions not satisfied)

Tom is talking to his dance partner Sue about Paul, the ballroom dancing teacher.
(Tom to Sue) "You think that Paul hates me."
(Sue to Tom) "You do, too."
You think that Paul hates me, too (=Tom thinks that Paul hates Sue).

Tom is talking to his dance partner Sue about Paul, the ballroom dancing teacher.
(Tom to Sue) "You think that Paul hates me."
(Sue to Tom) "You do, too."
You think that Paul hates you, too (=Tom thinks that Paul hates Tom).

Greg is gossiping to his roommate Tim about Karen, the girl down the hall. (Greg to Tim) "You know that Karen likes me."
(Tim to Greg) "You do, too."
You know that Karen likes me, too (=Greg knows that Karen likes Tim).

Greg is gossiping to his roommate Tim about Karen, the girl down the hall. (Greg to Tim) "You know that Karen likes me."
(Tim to Greg) "You do, too."
You know that Karen likes you, too (=Greg knows that Karen likes Greg).

Sam is talking to his friend Frodo about Gandalf the wizard.
(Sam to Frodo) "You believe that Gandalf told me the truth."
(Frodo to Sam) "Do you?"
Do you believe that Gandalf told me the truth? (=Does Sam believe that Gandalf told Frodo the truth?).

Sam is talking to his friend Frodo about Gandalf the wizard.
(Sam to Frodo) "You believe that Gandalf told me the truth."
(Frodo to Sam) "Do you?"
Do you believe that Gandalf told you the truth? (=Does Sam believe that Gandalf told Sam the truth?)

I and *you* in different clauses (intervener inanimate, pragmatic conditions not satisfied)

Sue is talking to her dance partner Tom.
(Sue to Tom) "I think that rock music makes you dance better."
(Tom to Sue) "I do, too."
I think that rock music makes you dance better, too (=Tom thinks that rock music makes Sue dance better).

Sue is talking to her dance partner Tom.
(Sue to Tom) "I think that rock music makes you dance better."
(Tom to Sue) "I do, too."
I think that rock music makes me dance better, too (=Tom thinks that rock music makes Tom dance better).

Adiba is talking to her sister Milie about her upcoming wedding.
(Adiba to Milie) "I know that bright colors make you happy."
(Milie to Adiba) "I do, too."
I know that bright colors make you happy, too (=Milie knows that bright colors make Adiba happy).

Adiba is talking to her sister Milie about her upcoming wedding.
(Adiba to Milie) "I know that bright colors make you happy."
(Milie to Adiba) "I do, too."
I know that bright colors make me happy, too (=Milie knows that bright colors make Milie happy).

Anne is talking to her friend Kay about a recent party in a funhouse with mirrors.
(Anne to Kay) "I saw that sugar made you act silly."
(Kay to Anne) "I did, too."
I saw that sugar made you act silly, too (=Kay saw that sugar made Anne act silly).

Anne is talking to her friend Kay about a recent party in a funhouse with mirrors.
(Anne to Kay) "I saw that sugar made you act silly."
(Kay to Anne) "I did, too."
I saw that sugar made me act silly, too (=Kay saw that sugar made Kay act silly).

You and *me* in different clauses (intervener inanimate, pragmatic conditions not satisfied)

Sue is talking to her dance partner Tom.
(Sue to Tom) "You think that tango music makes me dance better."
(Tom to Sue) "You do, too."
You think that tango music makes me dance better, too (=Sue thinks that tango music makes Tom dance better).

Sue is talking to her dance partner Tom.
(Sue to Tom) "You think that tango music makes me dance better."
(Tom to Sue) "You do, too."
You think that tango music makes you dance better, too (=Sue thinks that tango music makes Sue dance better).

David is talking to his friend Alice.
(David to Alice) "You believe that exercising makes me healthier."
(Alice to David) "Do you?"
Do you believe that exercising makes me healthier? (=Does David believe that exercising makes Alice healthier?)

David is talking to his friend Alice.
(David to Alice) "You believe that exercising makes me healthier."
(Alice to David) "Do you?"
Do you believe that exercising makes you healthier? (=Does David believe that exercising makes David healthier?)

Jon is talking to her mother Diana.
(Jon to Diana) "You wish that studying made me smarter."
(Diana to Jon) "Don't you?"
Don't you wish that studying made me smarter? (=Doesn't Jon wish that studying made Diana smarter?)

Jon is talking to her mother Diana.
(Jon to Diana) "You wish that studying made me smarter."
(Diana to Jon) "Don't you?"
Don't you wish that studying made you smarter?
(=Doesn't Jon wish that studying made Jon smarter?)

I + you in the antecedent / third person + *you* intended in the ellipsis site

Julie and her brother Paul are arguing.
(Julie to Paul) "I hate you."
(Paul to Julie) "The handsome neighbor does, too."
The handsome neighbor hates you, too (=the handsome neighbor hates Julie).

Julie and her brother Paul are arguing.
(Julie to Paul) "I hate you."
(Paul to Julie) "The cute neighbor does not."
The cute neighbor does not hate me (=the cute neighbor does not hate Paul).

Tommy and Stephanie are talking.
(Tommy to Stephanie) "I adore you."
(Stephanie to Tommy) "The smart student does, too."
The smart student adores you, too (=the smart student adores Tommy).

Tommy and Stephanie are talking.
(Tommy to Stephanie) "I adore you."
(Stephanie to Tommy) "The smart student does not."
The smart student does not adore me (=the smart student does not adore Stephanie).

Laura and Bobby are coworkers. They are having a discussion.
(Laura to Bobby) "I help you."
(Bobby to Laura) "The president does, too."
The president helps you, too (=the president helps Laura).

Laura and Bobby are coworkers. They are having a discussion.
(Laura to Bobby) "I help you."
(Bobby to Laura) "The president does not."
The president does not help me (=the president does not help Bobby).

Y*ou* + *me* in the antecedent / third person + *me* intended in the ellipsis site

Julie and her brother Paul are arguing.
(Julie to Paul) "You lied to me."
(Paul to Julie) "The coach did, too."
The coach lied to me, too (=the coach lied to Paul).

Julie and her brother Paul are arguing.
(Julie to Paul) "You lied to me."
(Paul to Julie) "The coach did, too."
The coach lied to you, too (=the coach lied to Julie).

Tommy and Stephanie are expressing their feelings about school.
(Tommy to Stephanie) "You encourage me."
(Stephanie to Tommy) "The teacher does, too."
The teacher encourages me, too (=the teacher encourages Stephanie).

Tommy and Stephanie are expressing their feelings about school.
(Tommy to Stephanie) "You encourage me."
(Stephanie to Tommy) "The teacher does, too."
The teacher encourages you, too (=the teacher encourages Tommy).

Laura and Bobby are coworkers. They are having a discussion.
(Laura to Bobby) "You teach me."
(Bobby to Laura) "The secretary does, too."
The secretary teaches me, too (=the secretary teaches Bobby).

Laura and Bobby are coworkers. They are having a discussion.
(Laura to Bobby) "You teach me."
(Bobby to Laura) "The secretary does, too."
The secretary teaches you, too (=the secretary teaches Laura).

I + *you* in the antecedent / third person + *his interlocutor* intended in the ellipsis site

Julie and her brother Paul are arguing.
(Julie to Paul) "I hate you."
(Paul to Julie) "It sounds like the neighbor does, too."
It sounds like the neighbor hates her interlocutor, too.

Julie and her brother Paul are arguing.
(Julie to Paul) "I hate you."
(Paul to Julie) "It sounds like the neighbor does, too."
It sounds like the neighbor hates me, too (=it sounds like the neighbor hates Paul).

Tommy and her girlfriend Stephanie are talking.
(Tommy to Stephanie) "I adore you."
(Stephanie to Tommy) "It looks like the student over there does, too."
It looks like the student over there adores his girlfriend, too.

Tommy and her girlfriend Stephanie are talking.
(Tommy to Stephanie) "I adore you."
(Stephanie to Tommy) "It looks like the student over there does, too."
It looks like the student over there adores me, too (=it looks like the student over there adores Stephanie).

Laura and Bobby are coworkers. They are having a discussion.
(Laura to Bobby) "I will help you."
(Bobby to Laura) "It looks like the secretary over there will, too."
It looks like the secretary over there will help her interlocutor, too.

Laura and Bobby are coworkers. They are having a discussion.
(Laura to Bobby) "I will help you."
(Bobby to Laura) "It looks like the secretary over there will, too."
It looks like the secretary over there will help me, too (=it looks like the secretary over there will help Bobby).

You + me in the antecedent / third person + _his interlocutor_ intended in the ellipsis site

Julie and her husband Paul are arguing about the President's radio interview.
(Julie to Paul) "You lied to me."
(Paul to Julie) "The President just did, too."
The President just lied to his interlocutor, too.

Julie and her husband Paul are arguing about the President's speech on the radio.
(Julie to Paul) "You lied to me."
(Paul to Julie) "The President just did, too."
The President just lied to you, too. (=the President just lied to Julie).

Tommy and Stephanie are expressing their feelings about school.
(Tommy to Stephanie) "You always encourage me."
(Stephanie to Tommy) "The teacher always does, too."
The teacher always encourages whoever she talks to, too.

Tommy and Stephanie are expressing their feelings about school.
(Tommy to Stephanie) "You always encourage me."
(Stephanie to Tommy) "The teacher always does, too."
The teacher always encourages you, too (=the teacher always encourages Tommy).

Laura and Bobby are coworkers. They are having a discussion.
(Laura to Bobby) "When we talk, you always teach me."
(Bobby to Laura) "The manager always does, too."
The manager always teaches whoever he talks to, too.

Laura and Bobby are coworkers. They are having a discussion.
(Laura to Bobby) "When we talk, you always teach me."
(Bobby to Laura) "The manager always does, too."
The manager always teaches you, too. (=the manager always teaches Laura).

Third person + *me* in the antecedent / third person + *me* intended in the ellipsis site

Paul and his sister Julie are discussing the school elections.
(Julie to Paul) "Jonathan voted for me."
(Paul to Julie) "Mike did, too."
Mike voted for me, too (=Mike voted for Paul).

Paul and his sister Julie are discussing the school elections.
(Julie to Paul) "Jonathan voted for me."
(Paul to Julie) "Mike did, too."
Mike voted for you, too (=Mike voted for Julie).

Harry and his girlfriend Catherine are discussing recent events.
(Catherine to Harry) "Mark wrote about me."
(Harry to Catherine) "Victor did, too."
Victor wrote about me, too (=Victor wrote about Harry).

Harry and his girlfriend Catherine are discussing recent events.
(Catherine to Harry) "Mark wrote about me."
(Harry to Catherine) "Victor did, too."
Victor wrote about you, too (=Victor wrote about Catherine).

Sara and Brigetta are talking about the Tournament of Roses "Princess Contest" in which five princesses are selected to be in the parade on New Year's Day.
(Sara to Brigetta) "Hugo picked me."
(Brigetta to Sara) "Sam did, too."
Sam picked me, too (=Sam picked Brigetta).

Sara and Brigetta are talking about the Tournament of Roses "Princess Contest" in which five princesses are selected to be in the parade on New Year's Day.
(Sara to Brigetta) "Hugo picked me."
(Brigetta to Sara) "Sam did, too."
Sam picked you, too (=Sam picked Sara).

Third person + *you* in the antecedent / third person + *you* intended in the ellipsis site

Paul is talking to his sister Julie.
(Paul to Julie) "The handsome neighbor loves you."
(Julie to Paul) "His sister does not."
His sister does not love you (=the handsome neighbor's sister does not love Paul).

Paul is talking to his sister Julie.
(Paul to Julie) "The handsome neighbor loves you."
(Julie to Paul) "His sister does not."
His sister does not love me (=the handsome neighbor's sister does not love Julie).

Laura and her boyfriend Bobby are talking.
(Laura to Bobby) "The intelligent student despises you."
(Bobby to Laura) "Her brother does not."
Her brother does not despise you (=the intelligent student's brother does not despise Laura).

Laura and her boyfriend Bobby are talking.
(Laura to Bobby) "The intelligent student despises you."
(Bobby to Laura) "Her brother does not."
Her brother does not despise me (=the intelligent student's brother does not despise Bobby).

Tommy is talking to his coworker Stephanie.
(Tommy to Stephanie) "The rude president mocks you."
(Stephanie to Tommy) "His wife does not."
His wife does not mock you (=the rude president's wife does not mock Tommy).

Tommy is talking to his coworker Stephanie.
(Tommy to Stephanie) "The rude president mocks you."
(Stephanie to Tommy) "His wife does not."
His wife does not mock me (=the rude president's wife does not mock Stephanie).

Third person + *me* in the antecedent / third person + *me* intended in the ellipsis site, with dependency between third person and *me*

Mary and Jane are talking about their husbands Marc and John.
(Mary to Jane about her husband Marc) "Marc would be reluctant to criticize me in public."
(Jane to Mary) "John wouldn't be."
John wouldn't be reluctant to criticize me in public (=Jane's husband John wouldn't be reluctant to criticize Jane in public).

Mary and Jane are talking about their husbands Marc and John.
(Mary to Jane about her husband Marc) "Marc would be reluctant to criticize me in public."
(Jane to Mary) "John wouldn't be."
John wouldn't be reluctant to criticize you in public (=Jane's husband John wouldn't be reluctant to criticize Mary in public).

Angelica and Lupe are talking about their daughters Anna and Liz.
(Angelica to Lupe about her daughter Anna) "Anna would be happy to call me every day."
(Lupe to Angelica) "Liz wouldn't be."
Liz wouldn't be happy to call me every day (=Lupe's daughter Liz wouldn't be happy to call Lupe every day).

Angelica and Lupe are talking about their daughters Anna and Liz.
(Angelica to Lupe about her daughter Anna) "Anna would be happy to call me every day."
(Lupe to Angelica) "Liz wouldn't be."
Liz wouldn't be happy to call you every day (=Lupe's daughter Liz wouldn't be happy to call Angelica every day).

Keiko and Okiwa are talking about their boyfriends Nagi and Yoshi.
(Keiko to Okiwa about her boyfriend Nagi) "Nagi would be pleased to help me any time."
(Okiwa to Keiko) "Yoshi wouldn't be."
Yoshi wouldn't be pleased to help me any time (=Okiwa's boyfriend Yoshi wouldn't be pleased to help Okiwa any time).

Keiko and Okiwa are talking about their boyfriends Nagi and Yoshi.
(Keiko to Okiwa about her boyfriend Nagi) "Nagi would be pleased to help me any time."
(Okiwa to Keiko) "Yoshi wouldn't be."
Yoshi wouldn't be pleased to help you any time (=Okiwa's boyfriend Yoshi wouldn't be pleased to help Keiko any time).

Third person + *you* in the antecedent / third person + *you* intended in the ellipsis site, with dependency between third person and *you*

Mary and Jane are talking about their husbands John and Bob.
(Mary to Jane about her husband Bob) "Bob would be reluctant to criticize you in public."
(Jane to Mary) "John wouldn't be."
John wouldn't be reluctant to criticize you in public (=John wouldn't be reluctant to criticize Mary in public).

Mary and Jane are talking about their husbands John and Bob.
(Mary to Jane about her husband Bob) "Bob would be reluctant to criticize you in public."
(Jane to Mary) "John wouldn't be."
John wouldn't be reluctant to criticize me in public (=John wouldn't be reluctant to criticize Jane in public).

Angelica and Lupe are talking about their daughters Maria and Melisa.
(Angelica to Lupe about her daughter Melisa) "Melisa would be happy to call you tomorrow."
(Lupe to Angelica) "Maria wouldn't be."
Maria wouldn't be happy to call you tomorrow (=Maria wouldn't be happy to call Angelica tomorrow).

Angelica and Lupe are talking about their daughters Maria and Melisa.
(Angelica to Lupe about her daughter Melisa) "Melisa would be happy to call you tomorrow."
(Lupe to Angelica) "Maria wouldn't be."
Maria wouldn't be happy to call me tomorrow (=Maria wouldn't be happy to call Lupe tomorrow).

Keiko and Okiwa are talking about their boyfriends Nagi and Yoshi.
(Keiko to Okiwa about her boyfriend Yoshi) "Yoshi would be pleased to help you next weekend."
(Okiwa to Keiko) "Nagi wouldn't be."
Nagi wouldn't be pleased to help you next weekend (=Nagi wouldn't be pleased to help Keiko next weekend).

Keiko and Okiwa are talking about their boyfriends Nagi and Yoshi.
(Keiko to Okiwa about her boyfriend Yoshi) "Yoshi would be pleased to help you next weekend."
(Okiwa to Keiko) "Nagi wouldn't be."
Nagi wouldn't be pleased to help me next weekend (=Nagi wouldn't be pleased to help Okiwa next weekend).

Third person + *me* in the antecedent / *you + me* intended in the ellipsis site

Paul and his sister Julie are discussing the school elections.
(Julie to Paul) "Jonathan voted for me."
(Paul to Julie) "Did you?"
Did you vote for me, too? (=Did Julie vote for Paul?)

Paul and his sister Julie are discussing the school elections.
(Julie to Paul) "Jonathan voted for me."
(Paul to Julie) "Did you?"
Did you vote for yourself, too? (=Did Julie vote for Julie?)

Harry and his girlfriend Catherine are discussing recent events.
(Catherine to Harry) "Mark wrote about me."
(Harry to Catherine) "You did, too."
You wrote about me, too (=Catherine wrote about Harry).

Harry and his girlfriend Catherine are discussing recent events.
(Catherine to Harry) "Mark wrote about me."
(Harry to Catherine) "You did, too."
You wrote about yourself, too (=Catherine wrote about Catherine).

Sara and Brigetta are talking about the Tournament of Roses "Princess Contest" in which five princesses are selected to be in the parade on New Year's Day.
(Sara to Brigetta) "Hugo picked me."
(Brigetta to Sara) "Did you?"
Did you pick me? (=Did Sara pick Brigetta?)

Sara and Brigetta are talking about the Tournament of Roses "Princess Contest" in which five princesses are selected to be in the parade on New Year's Day.
(Sara to Brigetta) "Hugo picked me."
(Brigetta to Sara) "Did you?"
Did you pick yourself? (=Did Sara pick Sara?)

Third person + *you* in the antecedent / *I + you* intended in the ellipsis site

Paul is talking to his wife Julie.
(Paul to Julie) "The handsome neighbor loves you."
(Julie to Paul) "I do, too."
I love you, too (=Julie loves Paul).

Paul is talking to his wife Julie.
(Paul to Julie) "The handsome neighbor loves you."
(Julie to Paul) "I do, too."
I love myself, too (=Julie loves Julie).

Laura and her colleague Bobby are having a fight.
(Laura to Bobby) "The new student despises you."
(Bobby to Laura) "I do, too."
I despise you, too (=Bobby despises Laura).

Laura and her colleague Bobby are having a discussion.
(Laura to Bobby) "The new student despises you."
(Bobby to Laura) "I do, too."
I despise myself, too (=Bobby despises Bobby).

Tommy is talking to his coworker Stephanie.
(Tommy to Stephanie) "The manager mocks you."
(Stephanie to Tommy) "I never would."
I would never mock you (=Stephanie would never mock Tommy).

Tommy is talking to his coworker Stephanie.
(Tommy to Stephanie) "The manager mocks you."
(Stephanie to Tommy) "I never would."
I would never mock myself (=Stephanie would never mock Stephanie).

Proper names

Sam and Joe are talking about their classmates.
(Sam to Joe) "Juliet adores Harry."
(Joe to Sam) "Harry does, too."
Harry adores Juliet, too.

Sam and Joe are talking about their classmates.
(Sam to Joe) "Juliet adores Harry."
(Joe to Sam) "Harry does, too."
Harry adores himself, too (=Harry adores Harry).

Tess and Sean are talking about their colleagues.
(Tess to Sean) "Matthew owes Clarissa."
(Sean to Tess) "Clarissa does, too."
Clarissa owes Matthew, too.

Tess and Sean are talking about their colleagues.
(Tess to Sean) "Matthew owes Clarissa."
(Sean to Tess) "Clarissa does, too."
Clarissa owes herself, too (=Clarissa owes Clarissa).

Bruce and Patricia are talking about their daughters while watching them model clothes in front of a department store mirror.
(Bruce to Patricia) "Ashley sees Kay."
(Patricia to Bruce) "Kay does, too."
Kay sees Ashley, too.

Bruce and Patricia are talking about their daughters while watching them model clothes in front of a department store mirror.
(Bruce to Patricia) "Ashley sees Kay."
(Patricia to Bruce) "Kay does, too."
Kay sees herself, too (=Kay sees Kay).

I + proper name, with dependency between them

Mary and Jane are talking about their husbands John and Bob.
(Mary to Jane about her husband John) "I hate it when John smokes cigars."
(Jane to Mary) "I do, too."
I hate it, too, when Bob smokes cigars (=Jane hates it, too, when her husband Bob smokes cigars).

Mary and Jane are talking about their husbands John and Bob.
(Mary to Jane about her husband John) "I hate it when John smokes cigars."
(Jane to Mary) "I do, too."
I hate it, too, when John smokes cigars (=Jane hates it, too, when Mary's husband John smokes cigars).

Angelica and Lupe are talking about their daughters Maria and Melisa.
(Angelica to Lupe about her daughter Maria) "I like it when Maria does the dishes."
(Lupe to Angelica) "I do, too."
I like it, too, when Melisa does the dishes (=Lupe likes it, too, when her daughter Melisa does the dishes).

Angelica and Lupe are talking about their daughters Maria and Melisa.
(Angelica to Lupe about her daughter Maria) "I like it when Maria does the dishes."
(Lupe to Angelica) "I do, too."
I like it, too, when Maria does the dishes (=Lupe likes it, too, when Angelica's daughter Maria does the dishes).

Keiko and Okiwa are talking about their boyfriends Nagi and Yoshi.
(Keiko to Okiwa about her boyfriend Nagi) "I like it when Nagi drives the car."
(Okiwa to Keiko) "I do, too."
I like it, too, when Yoshi drives the car (=Okiwa likes it, too, when her boyfriend Yoshi drives the car).

Keiko and Okiwa are talking about their boyfriends Nagi and Yoshi.
(Keiko to Okiwa about her boyfriend Nagi) "I like it when Nagi drives the car."
(Okiwa to Keiko) "I do, too."
I like it, too, when Nagi drives the car (=Okiwa likes it, too, when Keiko's boyfriend Nagi drives the car).

You + proper name, with dependency between them

Mary and Jane are talking about their husbands Marc and John.
(Mary to Jane about Jane's husband John) "You must hate it when John smokes cigars."
(Jane to Mary) "You must, too."
You must hate it, too, when Marc smokes cigars (=Mary must hate it when her husband Marc smokes cigars).

Mary and Jane are talking about their husbands Marc and John.
(Mary to Jane about Jane's husband John) "You must hate it when John smokes cigars."
(Jane to Mary) "You must, too."
You must hate it, too, when John smokes cigars (=Mary must hate it when Jane's husband John smokes cigars).

Angelica and Lupe are talking about their daughters Anna and Liz.
(Angelica to Lupe about Lupe's daughter Liz) "You must like it when Liz does the dishes."
(Lupe to Angelica) "You must, too."
You must like it, too, when Anna does the dishes (=Angelica must like it when her daughter Anna does the dishes).

Angelica and Lupe are talking about their daughters Anna and Liz.
(Angelica to Lupe about Lupe's daughter Liz) "You must like it when Liz does the dishes."
(Lupe to Angelica) "You must, too."
You must like it, too, when Liz does the dishes (=Angelica must like it when Lupe's daughter Liz does the dishes).

Keiko and Okiwa are talking about their boyfriends Yoshi and Nagi.
(Keiko to Okiwa about Okiwa's boyfriend Nagi) "Do you like it when Nagi drives the car?"
(Okiwa to Keiko) "Do you?"
Do you like it when Yoshi drives the car? (=Does Keiko like it when her boyfriend Yoshi drives the car?)

Keiko and Okiwa are talking about their boyfriends Yoshi and Nagi.
(Keiko to Okiwa about Okiwa's boyfriend Nagi) "Do you like it when Nagi drives the car?"
(Okiwa to Keiko) "Do you?"
Do you like it when Nagi drives the car? (=Does Keiko like it when Okiwa's boyfriend Nagi drives the car?)

I + this

Chris and Jane are each tasting a different wine.
(Jane to Chris) "I like this wine."
(Chris to Jane) "I do, too."
I like this wine, too (=Chris likes the wine he is tasting).

Chris and Jane are each tasting a different wine.
(Jane to Chris) "I like this wine."
(Chris to Jane) "I do, too."
I like this wine, too (=Chris likes the wine Jane is tasting).

Sheila and Brent are each listening to a different Broadway musical on a separate set of headphones.
(Brent to Sheila) "I like this musical."
(Sheila to Brent) "I do, too."
I like this musical, too (=Sheila likes the musical she is listening to).

Sheila and Brent are each listening to a different Broadway musical on a separate set of headphones.
(Brent to Sheila) "I like this musical."
(Sheila to Brent) "I do, too."
I like this musical, too (=Sheila likes the musical Brent is listening to).

Kathy and Gary are each petting a different dog.
(Gary to Kathy) "I like this dog."
(Kathy to Gary) "I do, too."
I like this dog, too (=Kathy likes the dog she is petting).

Kathy and Gary are each petting a different dog.
(Gary to Kathy) "I like this dog."
(Kathy to Gary) "I do, too."
I like this dog, too (=Kathy likes the dog Gary is petting).

You + that

Chris and Jane are each drinking a different type of wine.
(Jane to Chris) "You really like that wine!"
(Chris to Jane) "Don't you?"
Don't you really like that wine? (=Doesn't Jane really like the wine she is tasting?)

Chris and Jane are each drinking a different type of wine.
(Jane to Chris) "You really like that wine!"
(Chris to Jane) "Don't you?"
Don't you really like that wine? (=Doesn't Jane really like the wine Chris is tasting?)

Sheila and Brent are each listening to a different symphony on a separate set of headphones.
(Brent to Sheila) "Do you enjoy that symphony?"
(Sheila to Brent) "Do you?"
Do you enjoy that symphony? (=Does Brent enjoy the symphony he is listening to ?)

Sheila and Brent are each listening to a different symphony on a separate set of headphones.
(Brent to Sheila) "Do you enjoy that symphony?"
(Sheila to Brent) "Do you?"
Do you enjoy that symphony? (=Does Brent enjoy the symphony Sheila is listening to?)

Kathy and Gary are each interacting with a different canine friend.
(Gary to Kathy) "You love that dog."
(Kathy to Gary) "You do, too."
You love that dog, too (=Gary loves the dog with whom he is interacting).

Kathy and Gary are each interacting with a different canine friend.
(Gary to Kathy) "You love that dog."
(Kathy to Gary) "You do, too."
You love that dog, too (=Gary loves the dog with whom Kathy is interacting).

This + that

Naveen and Fariq are a married couple thinking about adopting two pets. They are each interacting with a different dog and each attempting to solicit the attention of two different cats nearby.
(Naveen to Fariq) "This dog is cuter than that cat."
(Fariq to Naveen) "This dog is, too."
This dog is cuter than that cat, too (=The dog with whom Fariq is interacting is cuter than the cat whose attention he is trying to solicit).

Naveen and Fariq are a married couple thinking about adopting two pets. They are each interacting with a different dog and each attempting to solicit the attention of two different cats nearby.
(Naveen to Fariq) "This dog is cuter than that cat."
(Fariq to Naveen) "This dog is, too."
This dog is cuter than that cat, too (=The dog with whom Fariq is interacting is cuter than the cat whose attention Naveen is trying to solicit).

Charles and Diana are two friends who are each tasting a different coffee and looking at two different tea brands on the internet.
(Charles to Diana) "This coffee is cheaper than that tea."
(Diana to Charles) "This coffee is, too."
This coffee is cheaper than that tea, too (=The coffee Diana is tasting is cheaper than the tea she is looking at online).

Charles and Diana are two friends who are each tasting a different coffee and looking at two different tea brands on the internet.
(Charles to Diana) "This coffee is cheaper than that tea."
(Diana to Charles) "This coffee is, too."
This coffee is cheaper than that tea, too (=The coffee Diana is tasting is cheaper than the tea Charles is looking at online).

Andrea and Karly are two sisters who are shopping together in a department store. They are each trying on a different dress and looking at two different hats on the rack.
(Andrea to Karly) "This dress would go well with that hat."
(Karly to Andrea) "This dress would, too."
This dress would go well with that hat, too (=The dress Karly is trying on would go well with the hat at which she is looking).

Andrea and Karly are two sisters who are shopping together in a department store. They are each trying on a different dress and looking at two different hats on the rack.
(Andrea to Karly) "This dress would go well with that hat."
(Karly to Andrea) "This dress would, too."
This dress would go well with that hat, too (=The dress Karly is trying on would go well with the hat at which Andrea is looking).

I + here

Peter is in San Francisco. Mary is in Beijing. They are talking on the phone.
(Peter to Mary) "I like it here."
(Mary to Peter) "I do, too."
I like it here, too (=Mary likes Beijing).

Peter is in San Francisco. Mary is in Beijing. They are talking on the phone.
(Peter to Mary) "I like it here."
(Mary to Peter) "I do, too."
I like it there, too (=Mary likes San Francisco).

Rachel is in Kamchatka, and Simon is in Yakutsk. They are talking over Skype.
(Rachel to Simon) "I feel good here!"
(Simon to Rachel) "I do, too."
I feel good here, too (=Simon feels good in Yakutsk).

Rachel is in Kamchatka, and Simon is in Yakutsk. They are talking over Skype.
(Rachel to Simon) "I feel good here!"
(Simon to Rachel) "I do, too."
I feel good there, too (=Simon feels good in Kamchatka).

Jaime is in Kansas. Isachar is in Arkansas. They are sending text messages to each other.
(Jaime to Isachar) "I don't know anybody here!"
(Isachar to Jaime) "I don't either."
I don't know anybody here, either (=Isachar doesn't know anybody in Arkansas).

Jaime is in Kansas. Isachar is in Arkansas. They are sending text messages to each other.
(Jaime to Isachar) "I don't know anybody here!"
(Isachar to Jaime) "I don't either."
I don't know anybody there, either (=Isachar doesn't know anybody in Kansas).

I + time indexical

Ian has just defended his dissertation. Cristina is looking for a job.
(Ian sending a text message to Cristina on Tuesday) "I am celebrating right now."
(Cristina replying to Ian on Saturday) "I am, too."
I am celebrating right now, too (=Cristina is celebrating on Saturday).

Ian has just defended his dissertation. Cristina is looking for a job.
(Ian sending a text message to Cristina on Tuesday) "I am celebrating right now."
(Cristina replying to Ian on Saturday) "I was, too."
I was celebrating then, too (=Cristina was celebrating on Tuesday).

Sandy has just graduated from college. George is trying to find the right home.
(Sandy leaving a voicemail for George on Sunday) "I rejoiced yesterday.
(George leaving a voicemail for Sandy on Tuesday) "I did, too."
I rejoiced yesterday, too (=George rejoiced on Monday).

Sandy has just graduated from college. George is trying to find the right home.
(Sandy leaving a voicemail for George on Sunday) "I rejoiced yesterday.
(George leaving a voicemail for Sandy on Tuesday) "I did, too."
I rejoiced then, too (=George rejoiced on Saturday).

Layne has just lost his job. Mark is preparing to finalize a divorce.
(Layne sending an email to Mark on Wednesday) "I will have to sign tomorrow."
(Mark replying to the email on Thursday) "I will, too."
I will have to sign tomorrow, too (=Mark will have to sign on Friday).

Layne has just lost his job. Mark is preparing to finalize a divorce.
(Layne sending an email to Mark on Wednesday) "I will have to sign tomorrow."
(Mark replying to the email on Thursday) "I will, too."
I will have to sign then, too (=Mark will have to sign on Thursday).

FOCUS CONDITIONS

I + you (crosscontextual alternatives)

Tom is talking to his partner Sue in a ballroom dancing class involving ten other couples.
(Tom to Sue) "Only I didn't make you fall over."
All the other dancers made their partner fall over.

Tom is talking to his partner Sue in a ballroom dancing class involving ten other couples.
 (Tom to Sue) "Only I didn't make you fall over."
All the other dancers made Sue fall over.

Samantha is at a summer camp with 10 other female friends of hers. She is on the phone with her mother.
(Samantha to her mother) "Only I call you every day."
Samantha's friends do not call their mother every day.

Samantha is at a summer camp with her three sisters. She is on the phone with her mother.
(Samantha to her mother) "Only I call you every day."
Samantha's sisters do not call their mother every day.

Martha works at a day care with three other childcare providers. They are each responsible for taking care of one child (there are four children total in the daycare). She is talking to the child Sally for whom she provides care.
(Martha to Sally) "Only I give you food."
No other childcare provider gives food to the child for whom they provide care.

Martha works at a day care with three other childcare providers. They are each responsible for taking care of one child (there are four children total in the daycare). She is talking to the child Sally for whom she provides care.
(Martha to Sally) "Only I give you food."
No other coworker gives food to Sally.

You + me (crosscontextual alternatives)

Sue is talking to her partner Tom in a ballroom dancing class involving ten other couples.
(Sue to Tom) "Only you made me swirl."
No other dancer made their partner swirl.

Sue is talking to her partner Tom in a ballroom dancing class involving ten other couples.
(Sue to Tom) "Only you made me swirl."
No other dancer made Sue swirl.

In the linguistics department, there are 10 undergraduate students writing theses under the supervision of 10 different professors. Martha is one of these undergraduate students.
(Martha's advisor to Martha) "Only you will not meet with me on Tuesday."
All the other students will meet with their advisers on Tuesday.

In the linguistics department, there are 10 undergraduate students writing theses under the supervision of 10 different professors. Martha is one of these undergraduate students.
(Martha's advisor to Martha) "Only you will not meet with me on Tuesday."
All the other students will meet with Martha's advisor on Tuesday.

At Boilinghotte Laboratories, there are 15 researchers doing experiments under the direction of 15 different principal investigators. Isachar is one of these researchers.
(Isachar's principal investigator to Isachar) "Only you will not see me on Saturday."
All the other researchers will see their principal investigators on Saturday.

At Boilinghotte Laboratories, there are 15 researchers doing experiments under the direction of 15 different principal investigators. Isachar is one of these researchers.
(Isachar's principal investigator to Isachar) "Only you will not see me on Saturday."
All the other researchers will see Isachar's principal investigator on Saturday.

I + you (discourse participants as only alternatives)

Tom is talking to his partner Sue.
(Tom to Sue) "Only I really love you."
You don't really love me (=Sue doesn't really love Tom).

Tom is talking to his partner Sue.
(Tom to Sue) "Only I really love you."
Nobody else really loves you (=Nobody else really loves Sue).

Samantha is on the phone with her mother.
(Samantha's mother to Samantha) "Only I call you regularly."
You don't call me regularly (=Samantha doesn't call her mother regularly).

Samantha is on the phone with her mother.
(Samantha's mother to Samantha) "Only I call you regularly."
Nobody else calls you regularly (=Nobody else calls Samantha regularly).

Martha is talking to her granddaughter Sally that she hasn't seen for years.
(Martha to Sally) "Only I recognize you."
You don't recognize me (=Sally does not recognize her grandmother Martha).

Martha is talking to her granddaughter Sally that she hasn't seen for years.
(Martha to Sally) "Only I recognize you."
Nobody else recognizes you (=nobody else recognizes Sally).

You + me (discourse participants as only alternatives)

Tom is talking to his partner Sue.
(Tom to Sue) "Only you really love me."
I don't really love you. (=Tom doesn't really love Sue)

Tom is talking to his partner Sue.
(Tom to Sue) "Only you really love me."
Nobody else really loves me (=nobody else really loves Tom).

Samantha is on the phone with her mother.
(Samantha to her mother) "Only you call me regularly."
I don't call you regularly (=Samantha doesn't call her mother regularly).

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Samantha is on the phone with her mother.
(Samantha to her mother) "Only you call me regularly."
Nobody else calls me regularly (=nobody else calls Samantha regularly).

Martha is talking to her granddaughter Sally that she hasn't seen for years.
(Martha to Sally) "Only you recognize me."
I don't recognize you (=Martha does not recognize her granddaughter Sally).

Martha is talking to her granddaughter Sally that she hasn't seen for years.
(Martha to Sally) "Only you recognize me."
Nobody else recognizes me (=nobody else recognizes Martha).

No c-command between *I* and *you* (crosscontextual alternatives)

David and several of his friends have signed up on an online dating site and each of them is now in touch with a possible partner. To make it romantic, they have decided to send a letter to their potential partner by snail mail.
(David chatting with his potential partner online) "Only the letter I sent didn't reach you."
All the letters sent by David's friends reached their potential partners.

David and several of his friends have signed up on an online dating site and each of them is now in touch with a possible partner. To make it romantic, they have decided to send a letter to their potential partner by snail mail.
(David chatting with his potential partner online) "Only the letter I sent didn't reach you."
All the other letters reached David's potential partner.

Karen and her 10 colleagues are researchers at NIH. They are each responsible for giving a pill to a participant chosen at random from 11 participants. Participants may be selected once, more than once, or not at all.
(Karen talking with her participant) "Only the pill I gave didn't harm you."
All the other pills given by Karen's colleagues harmed their participants.

Karen and her 10 colleagues are researchers at NIH. They are each responsible for giving a pill to a participant chosen at random from 11 participants. Participants may be selected once, more than once, or not at all.
(Karen talking with her participant) "Only the pill I gave didn't harm you."
All the other pills harmed Karen's participant.

Josh and his colleagues are trainers of guide dogs for the blind. Each trainer must take an examination to receive a promotion. In the examination, the trainers are blindfolded and asked to walk up to a dog and select the dog randomly. Each dog may be selected once, more than once, or not at all. A portion of the examination involves the dog correctly stopping at a stop sign/light.
(Josh talking to his canine friend) "Only the command I gave didn't stop you."
All the other commands given by Josh's colleagues stopped their selected dogs.

Josh and his colleagues are trainers of guide dogs for the blind. Each trainer must take an examination to receive a promotion. In the examination, the trainers are blindfolded and asked to walk up to a dog and select the dog randomly. Each dog may be selected once, more than once, or not at all. A portion of the examination involves the dog correctly stopping at a stop sign/light.
(Josh talking to his canine friend) "Only the command I gave didn't stop you."
All the other commands stopped Josh's selected dog.

No c-command between *you* and *me* (crosscontextual alternatives)

For Father's Day, Carla and her friends have prepared gifts for their fathers.
(Carla's father talking to Carla) "Only the gift you made made me laugh."
The gifts made by Carla's friends did not make their fathers laugh.

For Father's Day, Carla and her friends have prepared gifts for their fathers.
(Carla's father talking to Carla) "Only the gift you made made me laugh."
The other gifts did not make Carla's father laugh.

Anne and her coworkers prepared delicious desserts for their mothers for Mother's Day.
(Anne's mother talking to Anne) "Only the dessert you prepared made me happy."
The desserts prepared by Anne's coworkers did not make their mothers happy.

Anne and her coworkers prepared delicious desserts for their mothers for Mother's Day.
(Anne's mother talking to Anne) "Only the dessert you prepared made me happy."
The other desserts did not make Anne's mother happy.

Mr. Bjurokrat and his colleagues created exams for their students (each teacher has one student) to test their knowledge of California law.
(Mr. Bjurokrat's student, Jeremy, talking to Mr. Bjurokrat) "Only the exam you created made me cry."
The exams created by Mr. Bjurokrat's colleagues did not make their students cry.

Mr. Bjurokrat and his colleagues created exams for their students (each teacher has one student) to test their knowledge of California law.
(Mr. Bjurokrat's student, Jeremy, talking to Mr. Bjurokrat) "Only the exam you created made me cry."
The other exams did not make Mr. Bjurokrat's student (Jeremy) cry.

Two proper names

The teacher Paul is talking to his wife about the dancers of his ballroom dance class.
(Paul to his wife) "Only Tom made Sue swirl."
The other dancers in the class did not make their partner swirl.

The teacher Paul is talking to his wife about the dancers of his ballroom dance class.
(Paul to his wife) "Only Tom made Sue swirl."
The other dancers did not make Sue swirl.

The teacher Kyle is talking about his ESL (English as a Second Language) students who were given a homework assignment which involved contacting a conversation partner (classmate) to practice conversation in English.
(Kyle to his brother) "Only Fred made Wilma call."
The other students in the class did not make their partner call.

The teacher Kyle is talking about his ESL (English as a Second Language) students who were given a homework assignment which involved contacting a conversation partner (classmate) to practice conversation in English.
(Kyle to his brother) "Only Fred made Wilma call."
The other students did not make Wilma call.

The coordinator John is talking about his volunteers in the soup kitchen who were pressured to make a donation to the kitchen. The volunteers work as pairs to cook and serve food.
(John to his niece) "Only Arthur made Audrey give money."
The other volunteers in the group did not make their partner give money.

The coordinator John is talking about his volunteers in the soup kitchen who were pressured to make a donation to the kitchen. The volunteers work as pairs to cook and serve food.
(John to his niece) "Only Arthur made Audrey give money."
The other volunteers did not make Audrey give money.

Proper name + *me*

Sue is complaining to Paul, the ballroom dancing teacher, about her partner Tom.
(Sue to Paul) "Only Tom made me fall."
No other dancer in the class made their partner fall.

Sue is complaining to Paul, the ballroom dancing teacher, about her partner Tom.
(Sue to Paul) "Only Tom made me fall."
No other dancer in the class made Sue fall.

Rachel is talking to Samantha, her best friend, about her current lab partner Richard.
(Rachel to Samantha) "Only Richard made me drop the beaker."
No other laboratory classmate made their partner drop the beaker.

Rachel is talking to Samantha, her best friend, about her current lab partner Richard.
(Rachel to Samantha) "Only Richard made me drop the beaker."
No other laboratory classmate made Rachel drop the beaker.

Benjamin is talking to his brother Jesse about Christopher, his current debate partner.
(Benjamin to Jesse) "Only Christopher made me nervous."
No other debator in the class made their partner nervous.

Benjamin is talking to his brother Jesse about Christopher, his current debate partner.
(Benjamin to Jesse) "Only Christopher made me nervous."
No other debator in the class made Benjamin nervous.

Proper name + *you*

Paul, the ballroom dancing teacher, is praising Sue's partner Tom.
(Paul to Sue) "Only Tom made you swirl."
No other dancer in the class made their partner swirl.

Paul, the ballroom dancing teacher, is praising Sue's partner Tom.
(Paul to Sue) "Only Tom made you swirl."
No other dancer in the class made Sue swirl.

Kristi, the organic chemistry professor, is annoyed with Mary's current lab partner Shane.
(Kristi to Mary) "Only Shane made you fail the exam."
No other laboratory classmate made their partner fail the exam.

Kristi, the organic chemistry professor, is annoyed with Mary's current lab partner Shane.
(Kristi to Mary) "Only Shane made you fail the exam."
No other laboratory classmate made Mary fail the exam.

Ricki, the debate moderator, is talking with Jeremy about his current debate partner Greg.
(Ricki to Jeremy) "Only Greg made you forget the topic."
No other debator made their partner forget the topic.

Ricki, the debate moderator, is talking with Jeremy about his current debate partner Greg.
(Ricki to Jeremy) "Only Greg made you forget the topic."
No other debate partner made Jeremy forget the topic.