

A note on the non-de se interpretation of attitude reports

YINGYING WANG

Sun Yat-Sen University

HAIHUA PAN

*City University of Hong Kong and
Beijing Language and Culture University*

In this short report, we show that some elements usually deemed as obligatory DE SE anaphors may be interpreted as NON-DE SE in certain contexts. We argue that this non-de se reading cannot be subsumed under the category of DE RE, and suggest extending Kuno and Kaburaki's THEORY OF EMPATHY (Kuno & Kaburaki 1977, Kuno 1987) to interpret these readings as INDIRECT DE SE: namely, that the speaker empathizes with the attitude holder, helping the latter to do self-reference. Applying this idea to other anaphoric expressions like personal pronouns, we obtain a TRICHOTOMY of attitude reports—de se, de re, and indirect de se, contra the traditional de se and de re distinction. Our proposal can also help to account for Anand's (2006) observation that only first-person attitude reports in the PAST TENSE may have the non-de se reading.*

Keywords: de se, indirect de se, de re, empathy, attitude report

1. INTRODUCTION. Since Castañeda 1968, it has generally been held that an attitude report like 1a is ambiguous in the sense that it can report either a situation in which John uttered 1b or one in which he uttered 1c.

- (1) a. John_i believed that he_i was smart.
- b. I am smart.
- c. He_i is smart.

In the literature, the examples illustrating the latter situation typically assume that somehow John has lost his memory and does not know who he is. For instance, he has forgotten that his name is John and is reading a book about himself, John, even though he does not know it. In this case, what he thought may be 'He (i.e. the guy in the book) is smart', but not 'I am smart'. Nevertheless, one can still report John's thought by saying the sentence in 1a. According to Lewis (1979), these two readings in question are called the DE SE reading and the DE RE reading, respectively. The former suggests that 1a is true if John said that a certain individual has the property of 'being smart', being fully aware of the fact that the individual in question is he himself, while the latter indicates that 1a is true in a set of circumstances where John said that a certain individual has the property of 'being smart' without realizing that he is actually that individual.

Chierchia (1989) argues that there are structures in natural languages that must be interpreted as expressing de se beliefs only. Specifically, he claims that the obligatory control structure in English is always understood to be one of these. Consider the following scenario from Schlenker (2011): John is so drunk that he has forgotten that he is a candidate in the election. He watches someone on TV and finds that person to be a terrific candidate, who should definitely be elected. Unbeknownst to John, the candidate that he is watching on TV is actually himself. In this scenario, one cannot report John's thought by saying *John hopes to be elected*, as it is true only of scenarios in which John actually says, or is disposed to say, *I should be elected*. Since Chierchia 1989, many other constructions have been argued to have obligatory de se readings, such as sentences involving logophors, shifted indexicals, long-distance anaphors, and so forth.

* We would like to thank the editor, Greg Carlson, and anonymous referees for their helpful suggestions and comments on our paper. We also acknowledge the financial support of the following funding bodies, as this short report is part of the results derived from GRF grants (CityU 148610, CityU 11407214) from the Research Grants Council of Hong Kong Government, a CityU internal grant #7004093, and a grant (No. 13YJC740102) from the Humanity and Social Science Youth Foundation of the Ministry of Education, China.

In the recent literature, however, it has been noted by some scholars that the constructions mentioned above are not always interpreted as *de se* (see Pan 2001, Anand 2006, and Wang & Pan 2014 on the Chinese long-distance anaphor *ziji*; Oshima 2006, 2007 and Nishigauchi 2013 on the Japanese long-distance anaphor *zibun*; and Jaszczolt 2013 on the first-person pronoun and PRO). In fact, these constructions are compatible with non-*de se* readings in certain contexts, and in some circumstances, such non-*de se* readings are even possible in the contexts of attitude reports. In this short report, we show that these non-*de se* readings cannot be subsumed under the category of *de re* readings, as the traditional dichotomy between *de se* and *de re* attitude reports may suggest, and propose to extend Kuno and Kaburaki's theory of empathy (Kuno & Kaburaki 1977, Kuno 1987) to account for them. Furthermore, we argue that such non-*de se* readings can be extended to other anaphoric expressions like personal pronouns, and thus propose that besides the traditional *de se* and *de re* readings, an attitude report like 1a may have another non-*de se* reading—the indirect *de se* reading, namely, that the speaker empathizes with the attitude holder, say John, and then attributes the property of 'being smart' to him. We also show that our proposal helps to account for Anand's (2006) observation that only first-person attitude reports in the past tense can have the non-*de se* reading.

The rest of the paper is organized as follows: we first provide evidence, especially that concerning long-distance anaphors (LDAs), to show that some elements usually deemed as obligatory *de se* anaphors may also have non-*de se* readings and that Kuno and Kaburaki's notion of linguistic empathy can help to account for these cases (§2). Based on the empathic reading of these expressions, we then discuss the interpretation of attitude reports, and propose a trichotomy of attitude reports: *de se*, *de re*, and indirect *de se* (§3). We further discuss the interpretation of first-person attitude reports under Wechsler's (2010) *de se* theory of person indexicals, showing that the embedded *I* in an attitude report may also have the non-*de se* reading besides the other two readings in §4, and offer our conclusion in §5.

2. NON-DE SE ANAPHORS AND EMPATHY. Let us first consider LDAs. Since Chierchia 1989, LDAs in many languages—such as Italian possessive *proprio*, Japanese reflexive *zibun*, and Chinese reflexive *ziji*—have been proposed in the literature to be treated as OBLIGATORY DE SE ANAPHORS. For instance, in Chinese, the idea that the reflexive *ziji* is an obligatory *de se* anaphor when it is long-distance bound was coined by Pan (1995, 1997). To give an example, suppose that someone wrote a critical report about John to his supervisor, resulting in his being fired, though he did not know why he was fired. One day one of his friends who knew the reason told him a similar story without telling him that the story was about him, John. If John makes a statement to the effect that the report hurt the man who was fired, according to Pan, we or John's friends can express this by uttering the sentence in 2, but not that in 3.¹

- (2) John_i renwei nage baogao hai-le ta_i.
 John think that report hurt-PRF him
 'John_i thinks that report hurt him_i.'
- (3) John_i renwei nage baogao hai-le ziji_i.
 John think that report hurt-PRF self
 'John_i thinks that report hurt him*_i.'

¹ Abbreviations used in the examples are as follows: ACC: accusative, BEN: benefactive, CL: classifier, DAT: dative, NOM: nominative, PRF: perfective, PST: past, TOP: topic.

Although the connection between the Chinese LDA *ziji* and the de se interpretation (or self-ascription) helps to explain some properties of LDA *ziji*—such as backward shifting, subject orientation, and blocking effects—Pan’s claim that *ziji* is an obligatory de se anaphor has met with criticism. Consider the following example provided by Polard and Xue (2001).

- (4) [Scenario: Zhangsan is trapped in a burning building and faints. When he wakes up, he is safely outside. He thinks he was lucky, but in fact was saved by a passerby.]
 Zhangsan_i zai meiyou jian-guo jiu-le ziji_i ming de na-ge ren.
 Zhangsan again not see-PRF save-PRF self life DE that-CL person
 ‘Zhangsan didn’t see again the person who saved his life.’

This sentence with LDA *ziji* is perfectly acceptable, even though *ziji* has to be interpreted as non-de se. In fact, similar examples have also been given in other languages. In their early work on empathy and syntax, Kuno and Kaburaki (1977) use the following example to indicate that some uses of Japanese LDA *zibun* may have the empathic reading instead of the de se reading.

- (5) a. Taroo_i-wa [Hanako-ga zibun_i-ni kasite-**kure-ta**] okane-o
 Taroo-TOP Hanako-NOM self-DAT lend-BEN-PST money-ACC
 tukatte-simat-ta.
 spend-end.up-PST
 ‘Taroo has spent all the money that Hanako had lent to him.’
 b. *Taroo_i-wa [Hanako-ga zibun_i-ni kasite-**yat-ta**] okane-o tukatte-simat-ta.

Their notion of LINGUISTIC EMPATHY is defined as follows.

- (6) EMPATHY: Empathy is the speaker’s identification, with varying degrees (ranging from degree 0 to 1), with a person who participates in the event that he describes in a sentence. (Kuno & Kaburaki 1977:628)

As can be seen, the two sentences in 5 just differ in the choice of the giving verbs *kureta* and *yatta*, which encode the speaker’s different empathic perspectives: *kureta* indicates that the speaker empathizes with the recipient, while *yatta* indicates empathy with the agent. Kuno and Kaburaki argue that the contrast between 5a and 5b can be explained with the assumption that Japanese LDA *zibun* requires that the speaker empathize with its referent, because only 5b involves an irreconcilable conflict in the speaker’s empathy locus. Note that the licensing of *zibun* in 5a does not appeal to its de se reading. In fact, such a reading is not necessary, and only the speaker’s empathy with Taroo is required.

Since then, many researchers have used the empathy notion to account for the non-de se uses of LDAs, such as Sells (1987) and Oshima (2006, 2007) on Japanese *zibun*, Huang and Liu (2001) and Wang and Pan (2014) on Chinese *ziji*, and so forth. However, we find that there is a problem in the previous research. That is, most researchers tend to believe that the non-de se uses of LDAs occur only in extensional contexts like the sentences in 4 and 5 above, and not in intensional contexts such as those of attitude reports. For instance, in his dissertation, Anand (2006:155) states that his research scope is confined to the Chinese LDA *ziji* used in intensional contexts. One reason that he would give is that only in such contexts is LDA *ziji* obligatorily interpreted de se. From our perspective, however, this is not really correct. According to our observations, Chinese LDA *ziji* can be interpreted as non-de se even in attitude reports, especially in reported speech.

Consider the following example, cited by authors like Huang and Liu (2001) and Anand (2006).

- (7) [Scenario 1: Zhangsan says, ‘That thief stole my purse!’]
 [Scenario 2: Zhangsan says, ‘That thief stole that purse.’ (Zhangsan can’t see that it was his purse.)]
 Zhangsan shuo pashou tou-le ziji-de qianbao.
 Zhangsan say pickpocket steal-PRF self-DE purse
 ‘Zhangsan said that the pickpocket stole his purse.’

According to their descriptions, the Chinese sentence in 7 can only be uttered in the first scenario, and not in the second. For us, however, in the latter scenario, if the speaker (say, Bill) stands in Zhangsan’s shoes looking at the stealing event—or, using the notion of empathy defined in 6, if he empathizes with Zhangsan and attributes the relevant property to him—Bill can report Zhangsan’s speech by uttering the sentence in 7. Therefore, despite the non-de se reading of *ziji*, the sentence in question is still acceptable. Note that *ziji* used in this situation CANNOT be understood as having the DE RE reading, for it is not referential and bound to the matrix subject.

Moreover, recognizing the empathic interpretation of Chinese LDA *ziji* can help us account for properties of *ziji* such as subject orientation (see 8) and the blocking effect induced by the first/second-person pronoun (see 9), which are widely accepted in the literature.

- (8) Zhangsan_i gaosu Lisi_j ziji_{i/*j} ying-le.
 Zhangsan tell Lisi self win-PRF
 ‘Zhangsan_i told Lisi_j that he_{i/*j} had won.’
 (9) Zhangsan_i shuo wo_j piping-le ziji_{*i/j}.
 Zhangsan say I criticize-PRF self
 ‘Zhangsan_i said that I_j criticized self_{*i/j}.’

According to Kuno and Kaburaki (1977), the speaker’s choices of empathic point of view are subject to a number of constraints. We can use one of the constraints, namely the SURFACE STRUCTURE EMPATHY HIERARCHY in 10, to account for *ziji*’s subject orientation property, as it states that the speaker’s empathy with the referent of the subject should be higher than that with the referent of the object.

- (10) SURFACE STRUCTURE EMPATHY HIERARCHY: It is easiest for the speaker to empathize with the referent of the subject; it is next easiest for him to empathize with the referent of the object; ... It is next to impossible for the speaker to empathize with the referent of the *by*-passive agentive: Subject ≥ Object ≥ ... ≥ *By*-passive Agentive (Kuno & Kaburaki 1977:647–48)

In addition, we can employ their constraint in 11 to account for the blocking effect induced by the first-person pronoun.

- (11) THE BAN ON CONFLICTING EMPATHY FOCI: A single sentence cannot contain logical conflicts in empathy relationships. (Kuno & Kaburaki 1977:632)

Suppose that *ziji* in the embedded clause of 9 is in its empathic use, and the matrix subject *Zhangsan* is its antecedent. According to our earlier discussion, the speaker has to empathize with Zhangsan, that is, stand in Zhangsan’s shoes, in order to make the reported speech in question. The presence of the first-person pronoun *wo* ‘I’ in the same clause, however, induces a first-person perspective, which is in conflict with the empathic use of *ziji* (which is related to a third-person perspective), hence resulting in a violation of the ban on conflicting empathy foci, as stated in 11. Therefore, to avoid such a possible conflict, the long-distance binding of *ziji* in 9 is then prohibited.

In addition to the Chinese LDA *ziji*, it has been noted in the literature that other elements that were deemed as obligatory de se anaphors in intensional contexts may also

get non-de se readings, though the empathy requirement, as discussed above, has not been noticed before. To mention just a few, the logophoric pronoun in Mapun (see Oshima 2006), the shifted indexical in Zazaki (see Oshima 2006), and the Japanese LDA *zibun* (see Oshima 2006, 2007) are such items. As to these non-de se reading anaphors, we think that the straightforward application of Kuno and Kaburaki's theory of empathy in order to account for them, just like Chinese LDA *ziji*, is quite promising, since it is natural for the speaker to empathize with a person's lack of self-consciousness in a described event, thus helping him to do self-reference.

3. DE SE, DE RE, AND INDIRECT DE SE. In this section, we discuss the interpretation of attitude reports. Based on our empathic analysis of non-de se anaphors above, we think that the non-de se reading can be extended to the personal pronouns in attitude reports, and we propose that in addition to the traditional de se and de re readings, an attitude report like 1a, repeated below as 13, could have another reading in the situation that John's original utterance is 'He_i is smart' (unbeknownst to John, he himself is actually the person whom *he*_i refers to), namely that the speaker empathizes with John and attributes the property of 'being smart' to him.

(13) John_i believed that he_i was smart.

Since such a reading needs the speaker's empathy with the attitude holder, helping the latter to do self-reference, we call it the **INDIRECT DE SE** reading so as to distinguish it from the real **DE SE** reading, which requires that the attitude holder **SELF-ASCRIBE** the relevant property.² Recall that when discussing Chinese LDA *ziji* above we mentioned that this indirect de se reading also differs from the **DE RE** reading: the former requires a bound-variable interpretation, while the latter is neutral with regard to the speaker's empathic perspective, and can even have a referential interpretation, not related to the attitude holder.

To see the distinction between de se and indirect de se more clearly, we give Chierchia's (1989) definition of **ATTITUDE DE SE**.

(14) x stands in a belief relation with the property Q (i.e., x self-ascribed Q) iff x believes (de re) that x has Q , and furthermore, $K(x, x)$ where K is the cognitive access that we have to ourselves.

(15) $K(x, x) =_{\text{def}} x$ is disposed to describe the relevant belief by referring to x by the first-person pronoun. (Chierchia 1989:7–8)

As argued above, when x stands in a belief relation with the property Q , it does not definitely follow that x self-ascribes Q , for it might be the case that the speaker empathizes with x and then ascribes Q to x , thus x **INDIRECTLY SELF-ASCRIBES** Q . The relevant definition is given in 16.

(16) x indirectly self-ascribes Q iff x believes (de re) that x has Q , and $\neg K(x, x)$, but the speaker empathizes with x , and the speaker ascribes Q to x .

To summarize, attitude reports like 13 now have three possible interpretations: de se, indirect de se, and de re, thus a **TRICHOTOMY** of attitude reports.

But a question immediately springing to mind is whether our trichotomy of attitude reports also applies to first-person attitude reports like *I thought that I was smart*, for in such cases the attitude holders turn out to be the speakers themselves, which makes it hard to see the empathic interpretation of the embedded *I*. Our answer to this question is 'yes'.

² Since non-de se could in principle include de re, to differentiate the non-de se reading needing the speaker's empathy from de re, we introduce the new term 'indirect de se'.

Consider Kaplan's mistaken self-identity scenario provided in Maier 2009.

- (17) [Scenario: Kaplan is thinking about the time he saw a guy on TV whose pants were on fire without him noticing it yet. A second later he realized he was watching himself through the surveillance camera system and it was his own pants that were on fire.]
- a. I thought that I was at a safe distance from the fire.
 - b. I thought that I was remarkably calm.

According to Maier, the sentence in 17a is a first-person *de se* attitude report, for it is a report of Kaplan's first-person thought 'I am at a safe distance from the fire', while the sentence in 17b is a first-person *de re* attitude report, for the reported thought is 'That guy is remarkably calm', which is a third-person *de re* belief that just happens to be about Kaplan himself. In the following, we show that in the latter scenario, besides the *de re* reading, which points to the EXTERNAL SPEAKER, the indirect *de se* reading of 17b is also available, which points not to the external speaker but to the attitude holder, namely the INTERNAL SPEAKER.

To see the above difference we first need to clarify the distinction between the internal and external speakers of an attitude report. Consider the following direct speech made by John.

- (18) Bill said, 'I am smart.'

In 18, two speakers can be singled out. We treat Bill, whose speech is reported, as the internal speaker, and John, who makes the direct speech report, as the external speaker. Due to this distinction, it is easy to observe that the first-person pronoun *I* in the quotation in 18 refers to the internal speaker rather than the external speaker, so the possible confusion between these two can be avoided. Such a distinction also helps to explain how the indirect *de se* reading of first-person attitude reports can be achieved.

Let us look at 17b again. Although the person whose belief is reported (i.e. the internal speaker) and the person who makes the belief report (i.e. the external speaker) turn out to be the same person (Kaplan), these two can be distinguished as the same person but at different times.³ More specifically, suppose the time is *t*₁ when Kaplan is thinking 'That guy is remarkably calm', and the time is *t*₂ when Kaplan is making the belief report 'I thought that I was remarkably calm'. Since Kaplan at *t*₂ already knows that he is the very person to whom *that guy* refers, he could translate *that guy* used in the direct discourse into *I*, which directly refers to the external speaker (i.e. Kaplan at *t*₂), in the embedded clause of the attitude report in question. Therefore, in this situation, the embedded *I* should be read as *de re*, just as predicted by Maier. But another possibility is that Kaplan at *t*₂ empathizes with the internal speaker (i.e. Kaplan at *t*₁), who was ignorant of the fact that *that guy* refers to himself, and ascribes the property 'being remarkably calm' to the latter. In this situation, the indirect *de se* reading of the embedded *I* is thus derived. Notice that this is not a *de re* reading, since this reading involves the bound-variable interpretation of the embedded *I*, pointing to the internal speaker, just like the empathic reading of LDAs mentioned above, while the *de re* reading requires a referential interpretation of the embedded *I*, pointing to the external speaker.⁴

³ The belief holder of a belief report may be better called the internal believer. Here we use the unified notion 'the internal speaker' for reasons of convenience only.

⁴ The *de re* reading of the embedded *I* is more easily seen in an attitude report like *John said that I am smart*. Apparently, according to the standard theory of indexicals, *I* used in this case is referential, pointing to the external speaker. This reading is not related to the matrix subject, unlike the indirect *de se* reading in 17b, which always has the matrix subject as its antecedent.

An advantage of our proposed indirect de se reading of attitude reports is that it may help to explain a phenomenon mentioned in Anand 2006, namely that the first-person non-de se attitude ascription has to occur in the PAST TENSE, and not in the PRESENT TENSE (see also von Stechow 1982, Boer & Lycan 1986). That is to say, the first-person belief report *I think that I am smart*, in contrast to its counterpart used in the past tense, can only have the de se interpretation. Anand (2006:134) contends that this is because it is an epistemological truth that when I attribute something to myself in the present, I am making a claim about my present mental state based on my present knowledge. According to our analysis, an alternative explanation would be that only in the past-tense version (and not in the present-tense version) of the sentence *I thought that I was smart* can the internal and external speakers be distinguished as the same individual at different times, which then makes it possible for the latter to empathize with the former, doing self-reference and thus getting the indirect de se interpretation, which is non-de se in the same way as explained above regarding 17b. But the above possibility does not exist in the relevant sentence in the present tense, since it only has the speaker at a single time (i.e. the utterance time). Also note that in the past-tense situation, a de se interpretation of the embedded *I* is also allowed.

4. MORE ABOUT FIRST-PERSON ATTITUDE REPORTS. In this section, we revisit the interpretation of first-person attitude reports. Recently, Wechsler (2010) has proposed a DE SE THEORY OF PERSON INDEXICALS, wherein a first/second-person pronoun always indicates self-ascription by the speaker/addressee, contrary to the standard view that indexicals are directly referential expressions (cf. Kaplan 1989). So, given an utterance like 'I am smart', for Wechsler, *I* is specified for self-ascription of the property of 'being smart' BY the speaker, rather than reference TO the speaker himself. If Wechsler is correct, then one may ask whether our proposed de re and indirect de se readings of first-person attitude reports could still hold.

In fact, Wechsler's theory focuses on first/second-person pronouns used in single-clause sentences. If we move beyond this to pronouns used in the embedded clauses of attitude reports, we contend that the empathic reading of the first-person pronoun can still be obtained in the same way that was argued above. The question is: how about the de re reading? Actually, the de re reading of the embedded *I*, adopted by Maier (2009), is derived from Kaplan's (1989) directly referential theory of indexicals. Since Wechsler argues against such a position, if one adopts his de se theory of person indexicals, the de re reading of the embedded *I* cannot be maintained. Instead, according to Wechsler's theory, one should get the de se reading of the embedded *I* with respect to the external speaker. To illustrate this point, let us again consider Kaplan's mistaken self-identity scenario introduced in 17. Recall the situation when the de re reading of the embedded *I* in 17b is derived. That is, a second after thinking 'That guy is remarkably calm', Kaplan realized that he himself is the person to whom *that guy* refers. Kaplan then translated *that guy* in the direct discourse into *I* in his attitude report, pointing to the external speaker. Consequently, we can get the de re reading of the embedded *I* in this situation due to the standard directly referential theory of indexicals, as predicted by Maier. However, since Wechsler claims that the first-person pronoun is specified for self-ascription BY the (external) speaker, rather than reference TO the (external) speaker himself, the embedded *I* is used in this situation by the external speaker (i.e. Kaplan at t2) to self-ascribe the property of 'being remarkably calm'. This is just how the de se reading of the embedded *I* with respect to the external speaker is achieved by using Wechsler's de se theory of person indexicals. But note that the process of self-ascription done by the external speaker is different from that done by the internal speaker, since in

the latter a self-ascription process just takes place when the internal speaker reports his own first-person thought.

Therefore, if we adopt Wechsler's de se theory of *I*, our analysis of first-person attitude reports still holds, except that the traditional de re reading of the embedded *I* now changes to the de se reading with respect to the external speaker. More specifically, in a first-person attitude report like *I thought that I was smart*, the embedded *I* should have the following three possible interpretations.

- (19) a. de se with respect to the external speaker (corresponding to the traditional de re reading)
 b. de se with respect to the internal speaker
 c. indirect de se with respect to the internal speaker, which requires that the external speaker empathize with the internal speaker

Note that the reading in 19c is not predicted by Wechsler's account, since the embedded *I* is not always interpreted de se, as argued in §3. Also, the reading in 19c is different from that in 19a in the sense that the pronoun in the latter points to the external speaker, while that in the former points to the internal speaker, with the help of the external speaker, suggesting that the indirect de se reading in 19c is necessary and must be recognized.⁵

5. CONCLUSION. In this short report, we have shown that some elements usually deemed to be obligatory de se anaphors may be interpreted as non-de se in certain contexts. We have argued that the non-de se reading can be extended to other anaphoric expressions like personal pronouns and cannot be subsumed under the category of the de re reading, which does not involve the bound-variable interpretation of pronouns in question. We have suggested extending Kuno and Kaburaki's theory of empathy to account for the relevant readings. We have also proposed that in addition to the traditional de se and de re distinction, an attitude report may have another reading, that is, the indirect de se reading, which requires that the speaker empathize with the attitude holder, helping the latter to do self-reference. Our proposal also helps to account for Anand's (2006) observation that only first-person attitude reports in the past tense may have the non-de se reading.

REFERENCES

- ANAND, PRANAV. 2006. *De de se*. Cambridge, MA: MIT dissertation.
 BOER, STEPHEN, and WILLIAM LYCAN. 1986. *Knowing who*. Cambridge, MA: MIT Press.
 CASTAÑEDA, HECTOR-NERI. 1968. On the logic of attributions of self-knowledge to others. *The Journal of Philosophy* 65.439–56.
 CHIERCHIA, GENNARO. 1989. Anaphora and attitude *de se*. *Semantics and contextual expressions*, ed. by Renate Bartsch, Johan van Bentham, and Peter van Emde Boas, 1–31. Dordrecht: Foris.
 COLE, PETER; C.-T. JAMES HUANG; and GABRIELLE HERMON (eds.) 2001. *Syntax and semantics, vol. 33: Long-distance reflexives*. New York: Academic Press.
 HUANG, C.-T. JAMES, and C.-S. LUTHER LIU. 2001. Logophoricity, attitudes, and *ziji* at the interface. In Cole et al., 141–95.
 JASZCZOLT, KASIA M. 2013. Contextualism and minimalism on *de se* belief ascription. *Attitude de se: Linguistics, epistemology, metaphysics*, ed. by Neil Feit and Alessandro Capone, 69–104. Stanford, CA: CSLI Publications.
 KAPLAN, DAVID. 1989. Demonstratives. *Themes from Kaplan*, ed. by Joseph Almog, John Perry, and Howard K. Wettstein, 481–565. New York: Oxford University Press.

⁵ The existence of 19c indicates that Wechsler's (2010) theory of first/second-person pronoun interpretation may need further investigation, since these pronouns are not always interpreted de se, as he would suggest.

- KUNO, SUSUMU. 1987. *Functional syntax: Anaphora, discourse and empathy*. Chicago: University of Chicago Press.
- KUNO, SUSUMU, and ETSUKO KABURAKI. 1977. Empathy and syntax. *Linguistic Inquiry* 8.625–72.
- LEWIS, DAVID. 1979. Attitudes *de dicto* and *de se*. *The Philosophical Review* 88.523–43.
- MAIER, EMAR. 2009. Proper names and indexicals trigger rigid presuppositions. *Journal of Semantics* 26.253–315.
- NISHIGAUCHI, TAISUKE. 2013. Reflexive binding: Awareness and empathy from a syntactic point of view. *Journal of East Asian Linguistics* 23.157–206.
- OSHIMA, DAVID Y. 2006. *Perspectives in reported discourse*. Stanford, CA: Stanford University dissertation.
- OSHIMA, DAVID Y. 2007. On empathic and logophoric binding. *Research on Language and Computation* 5.19–35.
- PAN, HAIHUA. 1995. *Locality, self-ascription, discourse prominence, and Mandarin reflexives*. Austin: University of Texas at Austin dissertation.
- PAN, HAIHUA. 1997. *Constraints on reflexivization in Mandarin Chinese*. New York: Garland.
- PAN, HAIHUA. 2001. Why the blocking effect? In Cole et al., 279–316.
- POLLARD, CARL, and PING XUE. 2001. Syntactic and non-syntactic constraints on long-distance binding. In Cole et al., 317–42.
- SCHLENKER, PHILIPPE. 2011. Indexicality and *de se* reports. *Semantics: An international handbook of natural language meaning*, vol. 2, ed. by Klaus von Stechow, Claudia Maienborn, and Paul Portner, 1561–604. Berlin: De Gruyter Mouton.
- SELLS, PETER. 1987. Aspects of logophoricity. *Linguistic Inquiry* 18.445–79.
- VON STECHOW, ARNIM. 1982. Structured propositions. Arbeitspapier 59 des SFB 99, Universität Konstanz. Online: <http://www.sfs.uni-tuebingen.de/~astechow/Aufsaeetze/Structured%20Prop%201.pdf>.
- WANG, YINGYING, and HAIHUA PAN. 2014. Empathy and Chinese long-distance reflexive *ziji*—Remarks on Giorgi (2006, 2007). *Natural Language and Linguistic Theory*, to appear.
- WECHSLER, STEPHEN. 2010. What ‘you’ and ‘I’ mean to each other: Person indexicals, self-ascription, and theory of mind. *Language* 86.332–65.

Wang
 Institute of Logic and Cognition &
 Department of Philosophy
 Sun Yat-Sen University
 Xingangxi Rd 135
 Guangzhou, 510275, China
[\[wangyy65@mail.sysu.edu.cn\]](mailto:wangyy65@mail.sysu.edu.cn)

[Received 22 March 2013;
 revision invited 1 August 2013;
 revision received 15 January 2014;
 accepted 7 June 2014]

Pan
 Department of Linguistics and Translation
 City University of Hong Kong
 Tat Chee Avenue 83
 Kowloon, Hong Kong
[\[Haihua.Pan@cityu.edu.hk\]](mailto:Haihua.Pan@cityu.edu.hk)