

Thought *De se*, first person indexicals and Chinese reflexive *ziji*

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Abstract

In this paper, we make a distinction between the *de se* and non-*de se* interpretations of first person indexicals and Chinese reflexive *ziji*. Based on the distinction, we discuss the relationship between these expressions in Chinese, and point out the problems with Wechsler's (2010) *de se* theory of person indexicals as well as the inappropriateness of characterizing Chinese long-distance *ziji* as a logophor.

1. Background and motivation

According to Corazza (2004), the use of the first person pronoun has a special, privileged and primitive function among linguistic expressions: (i) its reference depends on the context of use. When you use the word *I*, it designates you; when I use the same word, it designates me; and (ii) this difference cannot be explained away or replaced by a co-referring term without destroying the cognitive impact the relevant use conveys, i.e., the so-called Irreducibility Thesis (Lewis 1979; Perry 1979).¹ We can use Perry's (1979) tale of the spilled sugar as an illustration:

(1) I once followed a trail of sugar on a supermarket floor, pushing my cart down the aisle on one side of a tall counter and back the

aisle on the other, seeking the shopper with the torn sack to tell him that he was making a mess. With each trip around the counter, the trail became thicker. But I seemed unable to catch up. Finally it dawned on me. I was the shopper that I was trying to catch.

- a. The shopper with the torn sack is making a mess.
- b. John Perry is making a mess.
- c. He [pointing to a reflection of himself in the mirror] is making a mess.
- d. I am making a mess.

As Corazza explains, Perry may hold any one of the beliefs in (1a-1c) without realizing that he himself is making a mess, thus without adjusting his behavior and acting accordingly. Only when he comes to entertain the thought expressed in (1d) is he likely to straighten the sugar sack in his shopping cart. This special mode of presentation of an utterance containing a first-person indexical is called *self-ascription* or reference/thought *de se* in the philosophical literature.

Although in English the first person pronoun *I* is unique in terms of (i) and (ii) mentioned above, we find that this is not the case in Chinese, as, besides first person pronoun *wo*, reflexive pronoun *ziji* also possesses these two properties, when it is in its indexical use with its reference to the speaker of the utterance, even though one does not find its counterpart in English. For instance, in Perry's tale of the spilled sugar example, once Perry holds the

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¹ According to Corazza, the same story can be told about paradigmatic uses of 'now' and 'here'. In this paper, we shall concentrate on the first-person pronoun.

following belief (suppose that Perry understands Chinese), he will also fix the torn sugar sack in his shopping cart, just like what he will do when he holds the belief in (1d).

- (2) *ziji ba dongxi gaode yi-tuan zao.*
 Self BA things make one-CL mess
 'Self is making a mess'.

In the literature, such a sentence-free use of *ziji* and its *de se* reading have been suggested by Pan (1997, 2001), Huang & Liu (2001), etc.

The questions that spring to mind are: (a) Are all the first/second person indexicals always interpreted *de se*? Can they be used as non-*de se* at all? (b) What is the relationship between first person *wo* and reflexive *ziji*? Is the *de se*/non-*de se* ambiguity involved in the latter?² In the following two sections, we will try to answer the questions in (a) and (b) respectively, based on previous research as well as our new observations. In Section 4 we will discuss the empirical and theoretical impacts of our discussion on these issues. The paper will be concluded in Section 5.

2. The first person indexical and the *de se*/non-*de se* distinction

It is acknowledged that thought *de se* is usually expressed by 'I'-sentences. For instance, my utterance 'I am hungry' expresses a *de se* thought of mine, which means that I self-ascribes the property of *being hungry*, according to Lewis' (1979) semantics on *de se* beliefs. Wechsler (2010) offers a *de se* theory of person indexicals, wherein the first person pronoun, and also the second person pronoun, indicates reference *de se* (or self-ascription). More specifically, it is proposed that the person feature of a pronoun specifies the speech-act roles that must be played by the self-ascriber in question: a [spk]

² Note that non-*de se* does not mean *de re*. In Section 3.3, we explain that Chinese long-distance reflexive *ziji* used in a speech report is not obligatorily *de se*, and in this situation, it can't be interpreted *de re*, either, for it is a long-distance bound anaphor, and its licensing condition needs speaker's empathy.

pronoun (e.g. *I*) designates the speaker in the context as the self-ascriber; a [addr] pronoun (e.g. *you*) designates the addressee in the context as the self-ascriber. Anyone who is not a designated self-ascriber for a given pronoun can only interpret it indirectly by inferring the self-ascriber's interpretation, a process requiring the theory of mind (Premack & Woodruff, 1978). So, for Wechsler, all pronominal reference to speech-act participants takes place via self-ascription, as suggested by the following:

- (3) THE SELF-ASCRPTION MONOPOLY: only as a consequence of grammatically specified self-ascription can a pronoun be knowingly used to refer to the speaker or addressee.

Therefore, no other person can use the first-person pronoun except for the speaker himself, and the same also applies to the addressee.

Following Crimmins (1992), Wechsler suggests to represent reference *de se* in the framework of DRT by the self-notion. Self-ascription is simply ascription via self-notion. For instance, in Perry's story, his pronoun *I* in (1d) is grammatically specified for referring via his self-notion $\text{Perry}_{n_{\text{self}}}$. In contrast, other co-referring expressions such as those in (1a)-(1c) do not necessarily involve the self-notion. Utterance (1b), for example, involves the notion of someone named Perry, i.e., $\text{Perry}_{n_{\text{named-perry}}}$. Therefore, the self-notion axiom, *Necessarily*, $\forall x[\text{ContentOf}(n_{\text{self}})=x]$, applies to the former, but not to the latter, and this explains why Perry is likely to fix the sugar sack when he holds the belief in (1d). Only if Perry knows his notion of $\text{Perry}_{n_{\text{named-perry}}}$ and his self-notion $\text{Perry}_{n_{\text{self}}}$ have the same content will he behave the same.

Although Wechsler's (2010) *de se* theory of person indexicals seems attractive, we do not think that the self-ascription monopoly, as shown in (3), is appropriate to interpret all

occurrences of person indexicals, especially the ones used in the embedded clauses of the first/second person belief reports. For us, the first/second person pronoun used in the embedded clause of a belief report may be interpreted *de se* or non-*de se* with respect to the matrix subject, and then get its reference to the speaker/hearer indirectly through the matrix subject, in addition to being interpreted *de se* with respect to the speaker/hearer in the context directly. Note that, the latter situation can be easily seen when the first person pronoun *I* is used in the embedded clause of the third person belief report 'John believes that I am smart'. And so is the case for the first person pronoun *I* used in the embedded clause of the first person belief report 'I believe that I am smart'. That is, in this case, both *I*'s can be understood as referring to the speaker in the context directly, and neither is dependent on the other.

To see the possible *de se* and non-*de se* interpretations of the first person pronoun with respect to the matrix subject, let's check Kaplan's mistaken self-identity scenario mentioned in Maier (2009):

(4) 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.

The embedded *I* used in (4a) can be interpreted *de se* with respect to the matrix subject, for what the agent thought at the time was 'I am at a safe distance from the fire', which is a first-person thought. However, in (4b), since its reported thought is 'That guy is remarkably calm', and *that guy* just happens to be Kaplan - the belief subject himself, the embedded *I* has to be interpreted non-*de se* with respect to the matrix

subject (though it is still possible for it to be interpreted *de se* with respect to the speaker in the context directly). Note that, according to the scenario above, the two *I*'s used in (4b) actually refer to the speaker at different times: the one in the matrix subject refers to the speaker when uttering 'that guy is remarkably calm' (t_1); the embedded one refers to the speaker at the speech time of (4b) (t_2). And the licensing of (4b) in such a situation needs the speaker's empathy, i.e., the speaker at t_2 empathizes with the speaker at t_1 .³ Since the speaker at t_2 knows that *that guy* in fact is he himself, though the speaker at t_1 does not know this, the former helps the latter do the self-reference. As can be seen from these two cases, the embedded *I* in (4b), but not in (4a), has two readings: (i) it is knowingly used to refer to the speaker at t_2 by the speaker t_2 ; and (ii) it is knowingly used by the speaker t_2 to refer to the matrix subject, without the awareness of the matrix subject, the speaker at t_1 , that is, the embedded *I* is used by the speaker at t_2 to attribute the property 'being remarkably calm' to the matrix subject, the speaker at t_1 , without his awareness, which is the non-*de se* interpretation of the embedded *I*, as mentioned above. The non-*de se* interpretation of the embedded *I* in (4b) thus shows that Wechsler's (2010) proposal that the reference of the first person pronoun to the speaker has to be obtained via the grammatically specified self-ascription is not really correct. If one insists on using Wechsler's theory to analyze the embedded *I*'s used in the two sentences in (4), then their possible different interpretations as *de se* and non-*de se* (empathy) with respect to the matrix subject can't be explained.

So, the appropriate use of the first person pronoun in the embedded clause of the first person *de se*/non-*de se* belief reports indicates

³ As to the notion of empathy, we adopt Kuno's (1987) definition that empathy is the speaker's identification, which may vary in degree, with a person/thing that participates in the event or state that he describes in a sentence.

that 'I'-sentences do not always involve the self-ascription of the speaker in the context. The fact is that the first person pronoun is possibly interpreted *de se/non-de se* with respect to the matrix subject, meaning that its reference to the speaker is not direct, and it is indirect via the matrix subject. Thus, Wechsler's (2010) self-ascription monopoly does not apply to all uses of the first and second person pronouns, and actually it only applies to all the first and second person pronouns that are interpreted directly to the speaker in the context, i.e., not via the matrix subject.

3. Chinese reflexive *ziji* and the *de se/non-de se* distinction

Chinese reflexive pronoun *ziji* basically has the following three uses: sentence-free *ziji*, locally bound *ziji*, and long-distance (LD) bound *ziji*. The first use was mentioned in Section 1, and the latter two can be illustrated by the sentence below:

- (5) Zhangsan_i renwei Lisi_j hen ziji_{i/j}.
 Zhangsan think Lisi hate self
 'Zhangsan thinks that Lisi hates him/himself.'

As can be seen in (5), *ziji* has two readings: one referring to Lisi is locally bound and the other referring to Zhangsan is LD bound. Only *ziji* in the former case observes Chomsky's (1981) Binding Condition A.⁴ In the following, we will discuss the *de se* and non-*de se* distinction of the interpretations of these three uses of *ziji*.

3.1 Sentence free *ziji*

As noted in Section 1, sentence free *ziji* expresses thought *de se* when it is used to refer to the speaker. In this situation, *ziji* can be replaced by first person pronoun *wo* without changing the meaning of the relevant sentence. As mentioned earlier, the *de se* interpretation of

⁴ Note that Chinese reflexive *ziji* is not marked for person or number. It is compatible with first, second and third person antecedents, both in the singular and in the plural.

sentence free *ziji* is suggested by Pan (1997, 2001), Huang & Liu (2001), etc. Contrary to Huang and Liu's view that unbound *ziji* has to refer to the speaker, Pan claims that, besides the speaker, *ziji* can also refer to the addressee, or even a third party salient in the discourse. Below is a case in point, as provided in (Pan, 2001):

- (6) Ziji weishenme bu qu ne?
 Self why not go Q
 'Why didn't self (you) go?'

In such a question form, *ziji* is naturally read as referring to the addressee. Besides, we can give another example to illustrate that *ziji* is possible to refer to a third party salient in the discourse. Suppose that Zhangsan's mother wants him to bring the chair near him to her, but he is busy with his computer game and refuses to help her. In this situation, I can express my dissatisfaction with Zhangsan to my friend Lisi in the following way:

- (7) Zhangsan zhen lan. Yizi jiu zai ziji de pangbian ne.
 Zhangsan very lazy Chair just is self DE near Ne
 'Zhangsan is very lazy. The chair is just near him!'

In (7), Zhangsan is salient in the discourse, and *ziji* can refer to him in the above scenario.

Note that *ziji* need not be treated as an adverb in (6), as suggested in Tsai (2002) who thinks sentence-free *ziji* is an adverb, not a reflexive pronoun.

- (8) Zuotian, Zhangsan ziji qu le Taipei.
 Yesterday, Zhangsan self go-PERF Taipei
 'Yesterday, Zhangsan went to Taipei by himself.'

One may think that it is possible that all the occurrences of sentence-free *ziji* are adverbs, and the subject is just deleted for short. For instance, (8) can be treated as a reduced form of (9):

- (9) Ni ziji weisheme bu qu ne?
 You self why not go Q
 'Why didn't self (you) go?'

However, this is not true, for the analysis of sentence free *ziji* as an adverb may be harmless for cases with *ziji* in the subject position, but not for cases with *ziji* in other positions. For example, in the following sentence, it is obvious that *ziji* as a complement to *chule* is not an adverb.

- (10) Zhe-ge xiangfa, chule ziji, zhiyou san-ge ren zancheng.
 This-CL idea, besides self only three-CL people agree
 'As for this idea, besides myself, only three people agree.'

Besides, the adverb use of *ziji* should follow the negation marker *bu* when they co-occur in a sentence (see Pan (1997)), which means that the use of *ziji* in (9) has to be a subject reflexive, or the intensive pronoun like *you yourself* (Baker 1989). In this paper, we follow Pan's (1997, 2001) analysis of the sentence free *ziji* in sentences like (6) as a reflexive pronoun.

Therefore, given that Chinese first person pronoun *wo* behaves just like its English counterpart *I*, its difference from sentence free *ziji* lies in that it is impossible for the former to refer to the individual other than the speaker, though the latter can sometimes refer to the addressee or a third person salient in discourse. However, when sentence free *ziji* is used to refer to the speaker, it can be replaced by *wo* without losing the *de se* content of the relevant sentence.

3.2 Locally bound *ziji*

The *de se/non-de se* ambiguity is also detected in reflexive sentences where *ziji* is locally bound. A case exemplifying this type of ambiguity is given below:

- (11) Zhangsan zai jingzi-li kan ziji.
 Zhangsan at mirror-in see self

Zhangsan saw himself in the mirror.

We can utter this sentence in situations no matter whether Zhangsan recognizes himself or not. The following two sentences illustrate this point:

- (12) Zhangsan zai jingzi-li kan ziji, bingqie yishi-dao ziji mei chuan yifu.

Zhangsan at mirror-in see self and realize self no wear clothes

Zhangsan saw himself in the mirror, and realized he himself was naked.

- (13) Zhangsan zai jingzi-li kan ziji, dan mei renchu ziji.

Zhangsan at mirror-in see self but no recognize self

Zhangsan saw himself in the mirror without recognizing himself.

Clearly, (12) and (13) suggest that local bound *ziji* is susceptible of *de se* and non-*de se* interpretations, respectively. There is no doubt that reflexive *ziji* is not interpreted *de se* in (13) because the whole sentence would come out as contradictory if it were interpreted *de se*.

3.3 Long-distance (LD) bound *ziji*

Compared to sentence free *ziji* and locally bound *ziji*, the *de se/non-de se* distinction is discussed more often in the research in LD bound *ziji*. The *de se* interpretation of LD *ziji* is first proposed by Pan (1997). According to him, LD *ziji* corresponds to the quasi-indicator *he** (Castañeda, 1966) in English, and hence always gets a *de se* interpretation. This is to say, given the following two scenarios, the sentence in (14) can only be uttered in the first scenario, but not in the second:

- (14) S1: Zhangsan says, "That thief stole my purse!"

S2: Zhangsan says, "That thief stole that purse!" (can't see that it was his purse).

Zhangsan renwei pashou tou-le ziji-de pibao.

Zhangsan think pickpocket steal-PERF self-DE purse

‘Zhangsan thought that the pickpocket stole his purse.’

However, Pan's proposal has met with criticism in the literature. Consider the following example which is originally provided by Huang and Tang (1991):

(15) Diving Scenario: Zhangsan is watching the video of the dives with some acquaintances. He likes one diver the best, but notices some people in the back snickering at the diver's form. He leans over and tells his neighbor, “I don't like those people who criticized that diver.” Unbeknownst to him, he himself is the diver.

Zhangsan_i bu xihuan naxie piping ziji_i de ren.

Zhangsan NEG like those criticize self DE person

‘Zhangsan does not like those people who criticize him.’

As indicated above, this sentence is acceptable even if *Zhangsan* does not know that he is speaking about himself. This is contrary to Pan's (1997) claim that LD *ziji* is obligatorily interpreted *de se*. Pollard and Xue (2001) make a similar point by giving the following example:

(16) 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 have see-PERF save-PERF self life DE that-CL person

‘Zhangsan didn't see again the person who saved his life.’

Clearly, this sentence shows again that the antecedent of LD *ziji* need not be the holder of the relevant *de se* attitude.

Although these examples are not consistent with Pan's claim, Anand (2006) points out that

there is no attitude predicate in the two sentences above, thus making issues of *de se* interpretation moot. According to Anand, Pan's generalization should be that LD *ziji* is definitely interpreted *de se* in intensional contexts, while not necessarily so in extensional contexts. This description apparently explains away the above two so-called counterexamples. However, we do not endorse Anand's (2006) claim on the *de se* and non-*de se* distinction of LD *ziji*, for we observe that LD *ziji* used in intensional contexts, especially in reported speech, is not obligatorily interpreted *de se*, either.⁵

Check the scenarios mentioned earlier in (14) (we repeat them as (17) below):

(17) S1: Zhangsan says, “That thief stole my purse!”

S2: Zhangsan says, “That thief stole that purse!” (can't see that it was his purse).

Zhangsan shuo pashou tou-le ziji-de pibao.

Zhangsan say pickpocket steal-PERF self-DE purse

‘Zhangsan said that the pickpocket stole his purse.’

In (17), the speaker reports Zhangsan's utterance by using the speech predicate *shuo* (*say*), instead of the epistemic predicate *renwei* (*think*) as in (14). Although it is generally held in the literature (e.g., Huang & Liu (2001), Anand (2006)) that the reported speech in (17) can only be uttered in the first scenario (if the scenario is the second one, the speaker has to replace *ziji* by the third person pronoun *he* with a *de re* interpretation), we do not think the obligatory *de se* reading of *ziji* in speech reports is definitely

⁵ It is not difficult to see that reported speech provides intensional contexts rather than extensional ones. For instance, we can't infer 'John said that the morning star is the evening star' from "John said that the morning star is the morning star". This means that the replacement of one expression by another with the same extension in a reported speech affects the truth value of the whole sentence, and therefore the context in a speech report is intensional.

required. According to our intuition, there is no problem for the speaker to utter the sentence in (17) in the second scenario if he/she knows that it is Zhangsan's purse that got lost, and then empathizes with Zhangsan, taking Zhangsan's point of view.

According to the literature, the empathic use of long-distance reflexives has already been detected in other languages such as Japanese (Kuno, 1987; Oshima, 2004, 2006). According to Oshima (2006), Japanese LD *zibun* basically has two uses: logophoric and empathic, and in attitude reports, although the logophoric use of *zibun* which requires obligatory *de se* reading is strongly preferred, the non-*de se* interpretation is not totally excluded. Just like Japanese *zibun*, we believe that Chinese *ziji* in attitude reports is not always a *de se* anaphor. So to speak, the empathic *ziji* with a non-*de se* interpretation is possible in indirect speech. Nevertheless, we find that these two languages differ in the hierarchy of attitude predicates in terms of their availability of the non-*de se* mode. According to Oshima (2006), the non-*de se* mode in Japanese is available for any type of the attitude predicate below: speech predicates, epistemic predicates, psychological predicates, and knowledge predicates, though with the following hierarchy:

(18) Speech Predicates < Epistemic Predicates / Psychological Predicates < Knowledge Predicates

Sentence (18) suggests that it is easier to use the non-*de se* mode in contexts with knowledge predicates, while it is harder to use the non-*de se* mode in contexts with speech predicates. According to Oshima, this conforms to the cross-linguistic generalization that, if in a given language (some) predicates in one class allows reports in the non-*de se* mode, so do (some) predicates in every class higher on the hierarchy. For instance, in Mapun, the non-*de se* mode can never be associated with *say*, though it is possible with other predicates. However,

according to our judgment of the relevant Chinese data, we do not think this generalization holds in Chinese. According to our intuition, while speech predicates and psychological predicates allow the non-*de se* mode, this mode marginally occurs in contexts with epistemic predicates or knowledge predicates, as we have already pointed out the possible non-*de se* reading of LD *ziji* in reported speech by using the example in (17). To further support this point, as an illustration of the possible non-*de se* reading of LD *ziji* in contexts with psychological verbs, consider the following example:

(19) Scenario: In Zhangsan's class, Lisi won a prize for his painting. Zhangsan, as Lisi's teacher, was very happy to hear this news. However, Lisi actually is Zhangsan's son, though he does not know this, because his son was lost at the age of three years old, and then was adopted by another family that he has never met.

Ziji erzi dejiang de xiaoxi rang Zhangsan hen gaoping.

Self son win-the-prize DE news make Zhangsan very happy

'That his son won the prize made Zhangsan very happy.'

In the scenario above, we think it is appropriate to utter the sentence in (19) if we empathize with Zhangsan, namely taking Zhangsan's point of view, as we know Lisi is actually Zhangsan's son, though he himself did not know this. But in the belief contexts, we see the opposite. For instance, the utterance of the sentence in (14) is very likely judged as false in the second scenario, and it is not getting better even if we change the epistemic predicate *renwei* (*think*) to the knowledge predicate *zhidao* (*know*). For now, the explanation of the difference between the hierarchy concerning the availability of non-*de se* mode in Chinese and other language (e.g., Japanese) is still not very clear to us, and we

thus leave it for future research.

To sum up, we observe that LD *ziji* is not an obligatory *de se* anaphor in either intensional or extensional contexts. In addition, we believe that the non-*de se* but empathic interpretation of LD *ziji* is more acceptable in contexts with speech predicates or psychological predicates than in contexts with epistemic predicates or knowledge predicates.

4. Discussion

Based on our observations above about the *de se* and non-*de se* distinction of the interpretation of the first person indexical and Chinese reflexive *ziji*, we discuss the empirical and theoretical impacts of our findings in this section.

First, the following implications can be put forward. (a) Neither the first person indexical nor the three uses of Chinese reflexive *ziji* is obligatorily interpreted *de se*. (b) Since the first person pronoun *wo* in Chinese does not have a shifted use in attitude reports, we need to use reflexive pronoun *ziji* (or third person pronouns, of course) in the embedded clause to refer to the believer or the speaker, if the relevant reports are third-person ones. (c) In the embedded clause of a first-person *de re* belief report in Chinese, the first person pronoun *wo*, rather than the reflexive *ziji*, is preferred to be used, due to the fact that the latter strongly favors a *de se* interpretation in belief reporting contexts.

Second, Wechsler's DRT framework for person indexicals is inadequate to characterize the belief reports involving the first/second person pronoun in the embedded clauses, though it works well for single-clause sentences. For instance, the single-clause sentence 'I am smart' uttered by Zhangsan can be characterized as follows:

(20) speaker: Conceives (Zhangsan, $\langle^z i_{\text{smart}}, {}^z n_{\text{self}}\rangle$, smart'(Zhangsan))

However, the belief report with an embedded clause 'Lisi believes that I am smart' uttered by

Zhangsan apparently can't be analyzed in the same way. But Wechsler himself ignore such cases in his paper. Besides, as mentioned in Section 2, the first/second person pronoun may also be interpreted as *de se* or non-*de se* with respect to the matrix subject in the sentence, thus getting its reference to the speaker/hearer indirectly through the matrix subject, in addition to being interpreted as *de se* with respect to the speaker in the context directly. Although the latter situation can be still interpreted in Wechsler's way, how to deal with the former situation is still a problem for us to solve in the future. For now, in Wechsler's DRT framework one cannot distinguish the possible different readings (i.e., *de se* and non-*de se*) of the embedded *I* used in the *de se* and non-*de se* attitude reports. We believe Kamp's (2011) work on DRT analysis of complex thoughts may shed some light on this issue.

Third, given the *de se* and non-*de se* distinction of the interpretation of the Chinese reflexive *ziji*, we find that the prevailing analysis of Chinese LD *ziji* as a logophor (e.g., Huang & Liu, 2001; Anand, 2006) may be problematic. At first, according to Oshima (2004, 2006), Sells' (1987) notion of logophoricity which incorporates the notion of point of view/empathy is misleading. Actually, Japanese data show that logophoricity and empathy play distinct roles in binding. Therefore, it is also inappropriate to treat Chinese LD *ziji* as a logophor in Sells' sense. Second, following Oshima's split treatment of Japanese LD *zibun*, one may propose that Chinese LD *ziji* also has two uses: logophoric and empathic. However, we think the purely logophoric use of LD *ziji* is suspicious because LD *ziji* has different distributions from the logophoric use of LD *zibun*. First, LD *ziji* is always subject-oriented (see (21)); and second, LD *ziji* involves the blocking effect induced by the first and second person pronouns (see (22)).

(21) Bill_i cong John_i na tingshuo ziji_{i/*j}

ying-le.

Bill from John there hear-from self
win-Perf

‘Bill_i heard from John_j that he_{i/*j} had won.’

(22) Zhangsan_i juede wo/ni_j zai piping ziji_{i/*j}.

Zhangsan think I/you at criticize self

‘Zhangsan thinks that I/you am criticizing
myself/yourself/*him.’

But, according to Oshima's (2004) analysis of the properties of the logophoric use of Japanese LD *zibun*, the above two properties are unexpected to be possessed by Chinese LD *ziji* if it has a purely logophoric use. Below we illustrate that Japanese logophoric *zibun* can be bound to a non-subject and can also co-occur with the first person pronoun.

(23) Bill-wa Johni-Kara zibun_i-ga Kat-ta
koto-o kii-ta.

Bill-Top John-from self-Nom win-Past
fact-Acc hear-Past

‘Bill heard from John_i that he_i had won.’

(24) Taro_i-wa boku-ga zibun_i-o but-ta
koto-o mada urande-i-ru.

Taro-Top I-Nom self-Acc hit-Past
fact-Acc still resent-Asp-pres

‘Taro_i still resents that I hit him_i.’

For this reason, our conjecture is that Chinese LD *ziji* does not have a purely logophoric use, and instead, it is an anaphor with the empathy requirement, as its properties such as subject-orientation and the blocking effect are also required for an anaphor with the empathy requirement (e.g., the empathic use of LD *zibun* has these two properties, as in (25) and (26)).

(25) Taro_i-wa Hanako_j-ni zibun-ga
sekkei-si-ta ie-de at-ta.

Taro-Top Hanako-Dat self-Nom
design-Past house-Acc meet-Past

‘Taro_i met Hanako_j in a house which
he_i/*she_j designed.’

(26) *Taro_i-wa boku-ga zibun_i-ni kasi-ta

okane-o nakusite-simat-ta rasi-i.

Taro-Top I-Nom self-Dat lend-past
money-Acc lose-end.up-Past seem-Pres

‘It seems that Taro_i lost the money I lent
him_i.’

And its preferred (but not obligatory) *de se* interpretation can be accounted for through pragmatics.⁶

5. Conclusion

In this paper, by making the *de se* and non-*de se* distinction of the interpretation of the first person pronoun and Chinese reflexive *ziji*, we have the following empirical and theoretical observations. (a) Neither of the first person indexical nor the three uses of Chinese reflexive *ziji* is obligatorily interpreted *de se*. (b) Since the first person pronoun *wo* in Chinese does not have a shifted use in attitude reports, we need to use reflexive pronoun *ziji* (or third person pronouns, of course) in the embedded clause to refer to the believer or the speaker, if the relevant reports are third-person ones. (c) In first-person non-*de se* belief reports in Chinese, the first person pronoun *wo* (not *ziji*) is preferred to be used in the embedded clause to express the speaker's non-*de se* beliefs. (d) Wechsler's (2010) self-ascription monopoly does not apply to all the occurrences of the first and second person pronouns; his theory has troubles when turning to first/second person belief reports with embedded *I/you* used to express *de se* or non-*de se* with respect to the matrix subject. (e) The prevailing analysis of Chinese LD *ziji* as a logophor is not appealing. Given the special properties of Chinese LD *ziji*, our conjecture is that it is an anaphor with the empathy requirement, and its preferred *de se* interpretation can be accounted for through pragmatics.

⁶ We have argued at length in another paper that Chinese LD *ziji* is not a logophor, but an anaphor with an empathy requirement.

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