De se marking, logophoricity, and ziji

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6.1 Introduction

At a party where alcohol is abundant, John is heavily drunk. John sees in the mirror a reflection of a person's pants on fire. Not realizing that the person is himself, John says: His pants are on fire! Soon afterwards, John feels a burning sensation and cries out, My pants are on fire! He rushes into the restroom and, in an effort to put out the fire, jumps into the toilet.

Apparently, John's thinking 'his pants are on fire' and 'my pants are on fire' are not equivalent, despite the fact that his and I refer to the same entity. Crucially, difference in thought leads to difference in behaviour, and it is only when John entertains the thought that his own pants are on fire that he takes the relevant action. According to Perry (1979), such thoughts contain an essential indexical element and are normally expressed using first-person pronouns; following Lewis (1979a), the irreducible, essentially indexical thoughts are dubbed de se.

Discussions of attitudes de se concern essentially two sets of problems. The first is philosophical. What is special about de se attitude ascription? Does de se attitude ascription necessitate a distinct de se content of thought? The second is linguistic. Are there distinct linguistic manifestations of de se content? If so, what is the logic of such linguistic forms? A central issue that connects these two sets of problems is what gives rise to de se interpretation—is it a matter of syntax, semantics, or pragmatics?² This chapter explores the nature of *de se* marking by looking closely into one alleged subtype.

Back at the party, Mary beholds John's incident and wastes no time broadcasting it on social media. Along with a picture, Mary tweets:

John says that his pants are on fire.

Mary's tweet is ambiguous. One way to read it is (2a), the other (2b); the former describes what John says when he first looks in the mirror, the latter what he says when he comes to obtain the pertinent self-awareness:

See Kaplan (1989a) for the original example.
 See also Jaszczolt and Witek, this volume.

- (2a) John says, 'His pants are on fire!'
- (2b) John says, 'My pants are on fire!'

It appears that in the reported context (1), his is ambiguous between a de se and a non-de se reading. Besides resorting to direct quotation, is there a dedicated type of expression that would convey John's de se thought in the reportative context? In other words, is it possible for Mary, or any of us, to report unequivocally John's essentially first-personal thought from a third-person perspective?

Castañeda (1966, 1967, 1968) creates an artificial pronoun $she^*/he^*/it^*$ to encode the attribution of de se attitude from a third-person perspective. He dubs it a 'quasi-indicator'. Unlike (1), (3) is not ambiguous and is equivalent to (2b) only.

(3) John says that his* pants are on fire.

Castañeda's suggestion prompts an interesting linguistic question. Is any natural language equipped with ways to express unequivocal *de se* attitude ascription? On these questions, Chierchia (1990) notes that obligatorily controlled PRO and the Italian reflexive *proprio* (self) both function as the natural-language counterpart of Castañeda's artificial quasi-indicator. In addition, Schlenker (1999, 2003) argues that Amharic *I* also triggers *de se* interpretation under context-shifting operators. However, he claims that neither PRO, Italian *proprio*, nor Amharic *I* are Castañeda's quasi-indicators in the strictest sense. In contrast, 'logophoric pronouns in the original sense (i.e. pronouns that are used only to "carry discourse," i.e. to report somebody's thoughts or words) are pure cases of Castañeda's he*' (Schlenker 1999: 105).

Coined by Hagège (1974), the term 'logophoric'—returning to the discourse—designates a particular category of anaphoric pronouns, personal and possessive, that refer to the author of a discourse or to a participant whose thoughts or words are reported. Morphologically marked logophoric pronouns are discovered in several West African languages, such as Aghem, Efik, Mundang, Gokana, Mundung, Tuburi, Ewe, and Ubangi. A much cited example is the logophoric pronoun *yè* in Ewe, which refers exclusively to the agent whose speech is being reported.

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(4) a. Kofi be yè-dzo.

Kofi say LOG-leave

Kofi said that he (himself) left.

(Clements 1975: 160, ex. 1)

b. Kofi be me-dzo.

Kofi say I-leave

Kofi said that I leave.

(Clements 1975: 160, ex. 1)

c. Kofi be e-dzo.

Kofi say s/he-leave

Kofi<sub>1</sub> said that she/he<sub>2</sub> leave.

(Clements 1975: 160, ex. 3)
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Drawing on extensive field studies, Clements (1975) proposes that logophors satisfy the following conditions:

• Logophoric pronouns are restricted to reportative contexts transmitting the words or thoughts of an individual or individuals other than the speaker or narrator.

- The antecedent does not occur in the same reportative context as the logophoric pronoun.
- The antecedent designates the individual or individuals whose words or thoughts are transmitted in the reportative context in which the logophoric pronoun occurs.

 (Clements 1975: 171)³

Are logophors obligatorily interpreted *de se*? There is some evidence that they are in languages such as Bafut (Kusumoto 1998), Yoruba (Anand 2006), and Tangale (Haida 2009). Indeed, many authors in the literature on attitude reports simply assume that logophors trigger mandatory de se requirement in Ewe and other languages (e.g. Heim 2001, 2002; Schlenker 1999; Stephenson 2010; von Stechow 2003). Nevertheless, even if logophors are paradigmatic of markers of *de se*, their very nature remains somewhat mysterious. To name just a few puzzles, logophoric pronouns are generally reported to take the third-person forms and sometimes the second-person, but rarely the first-person. What explains the rare occurrence, or nonexistence, of a first-person logophoric pronoun? Are there plural logophors, and how are they different from the singular ones? Are there author-/speaker-denoting as well as hearer/addressee-denoting logophoric pronouns? If logophors are real-life quasi-indicators, we should examine their nature thoroughly. Specifically, it is worth exploring the underlying mechanism responsible for the de se interpretation—is it a matter of syntax or does it follow from extralinguistic world knowledge, or a combination of both?

I propose to look very closely into the workings of logophors by putting a sharp focus on one allegedly representative subtype: *ziji* (self) in Chinese. *Ziji* is of high theoretical interest because it exhibits many of the characteristics associated with logophors. It is often used in indirect context and can refer back to the long-distance antecedent whose thoughts or words are being reported. Thus, many deem long-distance *ziji* a logophor, or claim that *ziji* has a logophoric use. It is also claimed that long-distance *ziji* automatically triggers *de se* requirement (e.g. Pan 1997, 2001; Huang and Liu 2001; Anand 2006; Huang 2013). However, *ziji* does not accord well with the pattern typically exhibited by the West African logophors. For instance, *ziji* can take plural antecedents, and it is also possible that *ziji* denotes the addressee. Besides, there is no consensus regarding the principles that give rise to the *de se* interpretation. Careful examination of the behaviour of *ziji*, therefore, is extremely important and valuable. Answering some controversies on *ziji* will help us arrive at a fuller grasp of logophoricity, and hence further our general understanding of how *de se* marking works in natural language.

I critically engage with and synthesize the most comprehensive accounts of *ziji* currently available. I argue that none of them aligns well with the complexity of the data, but we can nevertheless draw important lessons from these attempts. Crucially,

³ Clements points out that logophoric pronouns in Ewe are used exclusively in indirect discourse and other reportative contexts, referring to the agent 'whose speech, thoughts, feeling, or general state of consciousness are reported' (1975: 141). In direct discourse, logophoric pronouns are replaced by 1st-person pronouns.

long-distance *ziji* does not entail obligatory *de se* reading, and some of the puzzling data of long-distance *ziji* are deeply intertwined with the very notion of logophoricity and different ways to understand *de se*. As my observation favours a *de se*-neutral construal of *ziji*, it sheds new light on the study of logophoricity and indirectly provides some scepticism towards an unconditional affirmation of the existence of *de se* markers. The rest of this chapter is organized as follows. Section 6.2 begins with three sets of curious behaviour of *ziji* that all analyses must address. I then examine the accounts that tie *ziji* to *de se* interpretation. Section 6.3 discusses analyses that do not require *ziji* to be obligatorily *de se*. In section 6.4, I offer critical reflections on the key findings, relate my observations to recent advances in the study of logophors and *de se* attitude representation, and suggest some directions for future work.

6.2 Expressing self in Chinese

6.2.1 A first look

The Chinese reflexive *ziji* is traditionally regarded as an anaphor and as such is subject to Binding Condition A. It is observed, however, that the behaviour of *ziji* often violates the said constraint. Take (5). *Ziji* can denote either Janet or Jane; it can be bound either locally or long-distance:

(5) Jane_i renwei Janet_j xihuan ziji_{i/j}. Jane think Janet like self. Jane_i thinks that Janet_i likes her_{i/j}.

Besides, many state that when ziji is bound by its long-distance antecedent, it requires de se interpretation.

Consider two scenarios:

- (6) S₁: John sees a pickpocket running away with someone's purse. John does not know that the stolen purse belongs to himself. John says, 'The thief stole that (guy's) purse!'
 - S₂: John sees a pickpocket running away with someone's purse; further, John knows that it is his own purse that is stolen. John says, 'The thief stole my purse!'
- (7) John_i shuo pashou_j tou-le ta_i-de pibao. John say pickpocket steal-Perf he-POSS purse John_i said that the pickpocket_i stole his_i purse. [S₁:✓; S₂:✓]
- (8) John_i shou pashou_j tou-le ziji_i-de pibao. John say pickpocket steal-Perf self-POSS purse John_i said that the pickpocket_i stole his_i purse. [S₁: #; S₂: ✓]
- (7) and (8) illustrate the contrast between *ziji* and *ta* ('he'). Both can be anaphoric on John, but the long-distance binding of *ziji* is only legitimate when John is aware that

the stolen purse is none other than his own. The use of ta is validated in both S_1 and S_2 ; but ziji is vindicated in S_2 alone. Note that the de se scenario S_2 is a special case of the de re scenario S_1 , so (8) is a special case of (7). The relevant de se reading is necessary for long-distance ziji.

Additional evidence comes from sentence-free ziji in (9):

- (9) ziji ba zheli nongde hen luan Self BA here make very messy. 'Self is making a mess here.'
- (9) indicates a direct discourse, in which *ziji* is equivalent to the first-person pronoun *wo* (I) and denotes the speaker herself. That sentence-free *ziji* refers to the speaker provides extra support for the claim that *ziji* is *de se* (Pan 1997; Huang and Liu 2001). In short, the possibility of being long-distance bound and the accompanying *de se* requirement seem to support the thesis that *zjii* is a logophor.

Once we examine a wider range of data, however, things become very tricky. First, there is the infamous blocking effect, whose very formulation is not without controversy. Without going into too much technical detail, the blocking effect is the phenomenon whereby the anaphoric link between *ziji* and its long-distance antecedent is blocked when there is an intervening first- or second-person element; when the local binder is a first- or second-person element, *ziji* cannot be long-distance bound. This is illustrated by the contrast between the felicitous (10) and the infelicitous (11) and (12):

- (10) John_i juede Bill_j zai piping ziji_{i/j}. John think Bill at criticize self 'John_i thinks that Bill_i is criticizing him_{i/j}.'
- (11) John_i Juede wo_j zai piping ziji $*_{i/j}$ John Think wo at criticize self 'John_i thinks that I_i am criticizing $him_*_{i/i}$.'
- (12) John, juede ni, zai piping ziji*,/j.

 John think ni at criticize self

 'John, thinks that you, are criticizing him*,/yourself,.'

Second, it is not the case that sentence-free *ziji* always denotes the speaker. Pan (2001) and Wang and Pan (2012) point out that *ziji* may refer to the addressee, and sometimes even to a third-person salient referent in the discourse, as in (13) and (14):

(13) Ziji wei-she-me bu qu ne?
Self why no go Q
'Why don't self (you) go?' (Pan 2001)

Zhangsan zhen lan. (14)Yizi jiu zai ziji de pangbian ne. Zhangsan lazy. DE near Ne very Chair just is self 'Zhangsan is very lazy. The chair is just near him!' (Wang and Pan 2012) In my earlier work, I note that *ziji* can also have a 'donkey anaphora' reading, as shown in (15):

(15) Ziji chuang-de huo ziji fuze
Self rush-DE trouble self responsible
'Whoever causes the trouble should be responsible for it.' (Chen 2009)

On the other hand, there are examples where *ziji* does not appear to be obligatorily *de se*. As Cole et al. (2001) argue, long-distance *ziji* is acceptable in sentences such as (16) and (17), where *bu xiaode* ('not aware') and *wanggi* ('forget') entail that the matrix subject, i.e. the internal agent, does not have the relevant *de se* attitude:

- (16) Zhangsan_i bu xiaode Lisi_j hen taoyan ziji_i de gege. Zhangsan NEG aware Lisi very dislike self DE brother 'Zhangsan_i was not aware that Lisi_i hates his_i brother.'
- (17) Zhangsan; wangji-le Lisi, hen taoyan ziji, de gege. Zhangsan forget-PERF Lisi very dislike self DE brother 'Zhangsan; forgot that Lisi, hates his, brother.' (Cole et al. 2001: 4, ex. 4)

Apparently, the sentences do not 'report on the state of the world as pictured in the mind of the matrix subject' (Cole et al. 2001: 4). However, one may argue that the use of *ziji* is felicitous in (16) and (17) precisely because the attribution of the relevant *de se* thought to Zhangsan is negated. In other words, if Zhangsan thinks to himself: 'Lisi hates my brother!' then (16) cannot be true. In contrast, if Zhangsan thinks to himself: 'Lisi hates Jack!' but does not know that Jack is his own brother, then (16) can be true.

Still, this argument runs up against some limitations. First, while it makes sense to say that (16) negates the application of some *de se* attitude to the agent, it is less transparent what *de se* thought attribution (17) denies to Zhangsan. Moreover, there are other cases where *de se* reading is not required for long-distance *ziji*.

(18) Zhangsan $_i$ qing laoban $_j$ jianshang ziji $_i$ de haizi. Zhangsan ask boss reward self DE child 'Zhangsan $_i$ asked the boss $_i$ to reward his $_i$ child.' (Cole et al. 2001)

According to both Cole et al. (2001) and Anand (2006), this sentence is acceptable in the *de re* context, that is, (18) can be true when Zhangsan asked the boss to reward a child who Zhangsan did not know was really his own.

In addition, Wang and Pan (2012) argue that *ziji* is not obligatorily read *de se* in speech reports. Regarding the earlier example (8), repeated here as (19), they think *ziji* can be long-distance bound even when John is not aware that the stolen purse is his own. So long as the speaker, when uttering the sentence, knows that the purse belongs to John, empathizes with John and takes John's perspective, the use of *ziji* is permitted.

(19) John_i shuo pashou_j tou-le ziji_i-de pibao. John say pickpocket steal-Perf self-POSS purse John_i said that the pickpocket_i stole his_i purse. [S₁: \checkmark ; S₂: \checkmark]

 $^{^4\,}$ Minyao Huang raised this worry in comments on an earlier draft of this chapter.

As I see it, the debates surrounding examples (16)–(19) point to a core question: what does it really mean when we say a logophor such as *ziji* triggers *de se* interpretation? Apparently, our focus is *de se* attitude *attribution*. But can *de se* attitude attribution be completely independent of the attributee's self-ascription? If the occurrence of *ziji* does not require self-ascription of any sort, we seem to run the risk of turning *de se* attitude attribution into low-hanging fruit and making *de se* interpretation too easy. I will come back to this in section 6.4.

6.2.2 Two ziji?

The puzzle posed by *ziji* is this. *Ziji* does not always obey Binding Condition A, and as such it requires a special treatment. Previous analyses basically fall into two camps. One seeks syntactic explanation of the apparent violation of binding constraint, with the core idea that violation is only an illusion (e.g. Manzini and Wexler 1987 propose an expanded notion of governing category; Cole et al. 1990 and Huang and Tang 1991 advocate successive cyclic head-movement). The other camp tends towards an analysis with heavier dependence on pragmatic resources (e.g. Reinhart and Reuland 1993; Pan 1997, 2001; Huang and Liu 2001; Anand 2006). Syntactic accounts, however, typically have a hard time explaining the presence of *de se* interpretation—if long-distance binding really is local binding in a modified sense, then what gives rise to the *de se* requirement? On the other hand, analyses that assign discourse roles to long-distance binders often cannot give the blocking effect a satisfying explanation.

These difficulties have led some to argue for a dual-system approach. For example, Huang and Liu (2001) propose that *ziji* has two uses: locally bound *ziji* is an ordinary syntactic anaphor subject to Binding Condition A, and long-distance *ziji* is a logophor in the sense of Sells (1987). They further claim that availability of the relevant *de se* scenario is necessary for the logophoric reading, and that sentence-free *ziji* should be treated on a par with logophors, and by default denotes the external speaker. But this account is problematic in several ways. First, the analysis leaves much of the sentence-free *ziji* unexplained; as demonstrated in (13)–(15), *ziji* can refer to the speaker, the addressee, or a third party salient in the context, and may even allow for a quantification interpretation. Second, it fails to properly deal with sentences such as (16)–(18), whose long-distance binder of *ziji* lacks the *de se* attitude. Last, their explanation of the blocking effect rests on a problematic application of Kuno's (1987) direct discourse hypothesis.⁵

Another two-system analysis is due to Anand (2006). Anand argues that there are two sets of rules that constrain the behaviour of long-distance *ziji*, and that as a matter of fact, there are two Chinese dialects—LOG-Mandarin and IND-Mandarin. In LOG-Mandarin, *ziji* is a logophor and obligatory *de se*; in IND-Mandarin, *ziji* is a shiftable indexical much like Amharic-*I*.

⁵ See Chen (2009) for more details.

⁶ The wider context of Anand's analysis of *ziji* is the claimed three routes to a *de se* interpretation: (i) via SLEF/AUTH description: *de se* reading is a result of a semantic process under pragmatic constraints; (ii) via syntactic variable binding: a proform that carries [log] feature must be bound by a logophoric operator, and is subject to syntactic conditions; (iii) via indexical-shift: indexical shifts arise by overwriting a parameter of the semantic evaluation sequence.

In LOG-Mandarin, *de se* interpretation of long-distance *ziji* results from syntactic binding and is therefore mandatory. In IND-Mandarin, by contrast, *ziji* is just the working of semantic context-overwriting; so the *de se* reading is moot. The contrast between LOG-Mandarin and IND-Mandarin is summarized as follows:⁷

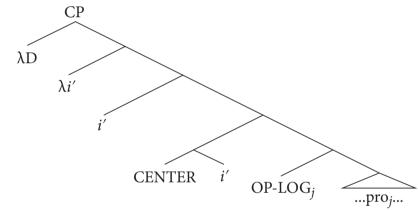
(20) IND-Mandarin ALL [att-verb (OPauth)] optionally shifts 1st-person indexicals (all attitude verbs)

LOG-Mandarin ALL [att-verb (OP-LOGu)] optionally binds all [log] items

(all attitude verbs)

- (21) In IND-Mandarin:
 - a. All attitude predicates allow OP_{auth} headed complements.
 - b. $[ziji]^{c,i} = AUTH(c) = [wo]^{c,i}$
 - c. Binding Optionality: Mandarin attitude verbs may select for an OP_{auth} complement.
- (22) In LOG-Mandarin:⁸
 - a. $[OP-LOG_j \alpha] = \lambda x. [\alpha]^{g[x \to j]}$
 - b. $[CENTER]^g = \lambda i.AUTH(i)$

c.



⁷ The typology presented here is different from Anand's example (2006: 136, ex. 403): Mandarin-internal typology:

 LOG-Mandarin
 ALL[att-verb (OPauth)]
 optionally shifts 1st-person indexicals
 (all attitude verbs)

 IND-Mandarin
 ALL[att-verb (OP-LOGu)]
 optionally binds all [log] items
 (all attitude verbs)

Anand confirmed in email correspondence that (403) is mistaken. What I have in (20) is his intended typology.

Though the binding of *ziji* in LOG-Mandarin is syntactic, the covert referentially denoting P(erspectival)-Center is not determined solely by syntax. P-center is, according to Anand and Hsieh (2005), 'a point-of-view head high in the left periphery that referentially denotes the psychological perspective from which the sentence is situated (in analogy to the deictic center for a sentence'. The value of the P-Center is at least partially discourse-dependent. In other words, *ziji* in LOG-Mandarin may refer to the speaker, the addressee, or even a salient third person. Here is Anand and Hsieh's P(erpsective)-Center discourse rules:

Discourse Rule 1: In unmarked contexts, the P-Center is the speaker.

Discourse Rule 2: When a speech-act-participant (SAP) is the matrix subject, the P-Center is that SAP. The P-Center can be a non-SAP in marked contexts, where the 3rd person is established by discourse to be the perspective-holder (e.g. narrative).

Here is one salient contrast, according to Anand, between IND-Mandarin and LOG-Mandarin. Consider the test for *de se*, now with a first-person antecedent:

S₁: I say, 'That thief stole my purse!'
S₂: I say, 'That thief stole that purse!' (not knowing it was *my* purse)
wo shuo pashou tou-le ziji-de pibao.
I say pickpocket steal-PERF self-DE purse
'I said that the pickpocket stole my purse.' LOG-Mandarin [S₁:✓; S₂: #]
'I said that the pickpocket stole my purse.' IND-Mandarin [S₁:✓; S₂:✓]
(Anand 2006: 138, ex. 410)

It is argued that IND-Mandarin allows non-obligatory *de se* reading of *ziji*. As shown in (23), *ziji* can be used in *de re* scenarios as long as the antecedent is first-person. This makes sense if the long-distance binding of the first person is licensed without the need to introduce an operator in IND-Mandarin. In contrast, for LOG-Mandarin speakers, *ziji* must be read *de se*, whether the antecedent is the first or the third person.

As to the blocking effect, Anand submits it as a case of polarity, and for IND-Mandarin he further stipulates a movement rule Indexical Rigidity. 10

- (24) Blocking effect as a case of polarity:
 - a. For IND-Mandarin:
 - i. Indexical Polarity: wo and ni cannot be in the scope of a shift operator.
 - ii. Indexical Rigidity: Indexicals cannot move. (from Anand 2006: 131)
 - b. For LOG-Mandarin: LOG-Mandarin indexical polarity: *wo* and *ni* cannot be in the scope of an OP-LOG_i. (from Anand 2006: 136)

Crucially, however, Anand predicts that IND-Mandarin allows blocking effect amelioration, but when amelioration takes place, the embedded noun phrase must be read *de re*. Take the following scenarios:

(25) S₁: John says, 'Mary's book hit me!' (But it is in fact not Mary's book) de dicto S₂: John says, 'That book hit me!' (But John doesn't know it's Mary's book) de re

Assume that Mary is the speaker of (26):

(26) John_i shou [wo_j de shu] dadao-le ziji_i John say I POSS book strike-PERF self John_i said that my_j book hit him_i. [S₁: #; S₂: \checkmark]

⁹ Anand's characterization of the blocking effect covers not only cases where the 1st- or 2nd-person element appear in the embedded clause, but cases where the blocker is in a subordinate clause to *ziji*.

¹⁰ The justification is that movement of indexicals would lead to conflicts in the operator-theoretic explanation of indexical shift, since the principle NO INTERVENING BINDER would cease to be valid. See Anand (2006: 131).

Because wo du shu (my book) is an offending item of Indexical Polarity, long-distance ziji ought to be prohibited in (26). But Anand argues that for speakers of IND-Mandarin, (26) is acceptable in S_2 with an obligatory de re reading. In other words, blocking-effect repair is possible through movement. As the DP moves out of the scope of the operator, it also moves out of scope of the intensional quantification, so 'my book' must be read de re.

Anand's analysis has several advantages. First, its treatment of long-distance *ziji* is not isolated but reasonably extends to the analysis of sentence-free *ziji*. Second, it offers a plausible account of the blocking effect and the possibility of repair. Third, it puts the phenomenon of *ziji* into broader context such that its theoretical significance to the study of shiftable indexicals and routes to *de se* is better appreciated.

This theory nevertheless rests heavily on a series of examples that allegedly distinguish the two Chinese dialects. I have attempted to duplicate Anand's result in Chen (2010); my informants, however, did not demonstrate the kind of sharp, systematic variations that could verify Anand's distinction. Below I highlight two key points: the first concerns the alleged contrast between IND-Mandarin and LOG-Mandarin; the second concerns the purported evidence for treating *ziji* in IND-Mandarin as a shiftable indexical.

According to Anand, LOG-Mandarin speakers, but not IND-Mandarin speakers, are subject to *de re* blocking:

- (27) *De re* blocking effect:
 - a. All [log] (pro*/de se anaphor) elements must be de re free.
 - b. No obligatory de se anaphor can be c-commanded by de re counterpart. 12

Take (28):

John; renwei Bill; gei ta; ziji; de shu.
 John thinks Bill give he self-POSS book.
 'John; thinks that Bill; gave him; his*i/j book.' LOG-Mandarin
 'John; thinks that Bill; gave his; mother his;i/j book.' IND-Mandarin

Let's stipulate that *ta*, the third-person pronoun, denotes John. As *ta* c-commands *ziji*, it is a *de re* equivalent to the potential long-distance binder John. According to Anand, native speakers who think the anaphoric link can be established speak IND-Mandarin and those who don't speak LOG-Mandarin.

In Chen (2010), the informants are asked to judge whether an interpretation is acceptable, unacceptable, or marginally acceptable. The result for (29) is shown in Table 6.1.

¹¹ Anand's informants are Taiwanese Mandarin speakers in Boston, Mass. My informants are 45 native Mandarin Chinese speakers residing in Taiwan.

Anand (2006) states that *de re* blocking effect holds in Yoruba and is considered characteristic of languages with logophoric pronouns.

(29) Zhangsan_i renwei Lisi_j gei-le ta_i ziji_{*i/j} de su. Zhangsan think Lisi give-LE he self DE book. 'Zhangsan_i thinks that Lisi_j gave him_i his_{*i/j} book.' ??LOG-Mandarin 'Zhangsan_i thinks that Lisi_j gave him_i his_{i/j} book.' ??IND-Mandarin

TABLE 6.1 The result for example (29)				
(29)	Acceptable	Unacceptable	Marginal	
his _i =Zhangsan's	16	15	14	
his _j =Lisi's	24	9	12	

Indeed, native speakers are divided in their opinion on whether *ziji* can be long-distance bound. However, the informants do not show any orderly, systematic split in their judgements about (29) and similar constructions. This makes it extremely difficult to label any informant as a speaker of IND-Mandarin or LOG-Mandarin.

Another telling example is (30) with the result in Table 6.2.

(30) Zhangsan_i renwei Lisi_j gei-le ta_i-de mama ziji_{i/j} de su. Zhangsan think Lisi give-LE his mother self DE book 'Zhangsan_i thinks that Lisi_j gave his_i mother his_{i/j} book.' ??ALL

TABLE 6.2 The result for example (30)				
(30)	Acceptable	Unacceptable	Marginal	
his _i =Zhangsan's	14	19	12	
his _j =Lisi's	20	8	17	

Contrary to Anand's prediction, not every speaker reckons (30) grammatical. While there is still a preference for *ziji* to be bound by the closer binder, the most interesting fact is that, overall, informants judge (30) to be less acceptable than (29). Not only do fewer people approve the long-distance reading of *ziji*, but even the less problematic local reading becomes harder to appreciate.

These findings challenge the empirical foundation of the stated divide between IND-Mandarin and LOG-Mandarin. What's more, there is evidence that treating *ziji* in IND-Mandarin as a shiftable indexical is also questionable.

Ziji in IND-Mandarin is said to be a shiftable indexical because it obeys Anand and Nevins's (2004) SHIFT TOGETHER, i.e. when multiple tokens of the same indexical occur in an embedded clause, they are assigned the same value.¹³ Take the Zazaki-*I*, for instance:

¹³ Anand and Nevins (2004) report that all indexicals (1st person, 2nd-person temporal locative) can optionally shift under Zazaki-*says*. However, the indexical shift is constrained. Multiple occurrences of the same indexical must shift together, or they do not shift at all. This SHIFT TOGETHER rule is said to hold for several other languages that have shiftable indexicals. According to Anand and Nevins, such phenomena are best explained if we assume Zazaki contains monstrous operators.

- (31) (in Zazaki) Bill said that I argued with my mother.
- (32) a. $\#Bill_i$ said that I_c argued with my_i mother.
 - b. Bill_i said that I_c argued with my_c mother.
 - c. Bill, said that I, argued with my, mother.
 - d. # $Bill_i$ said that I_i argued with my_c mother.

Suppose John is the speaker here. (31) is only two-way ambiguous instead of four; the mixed readings, i.e. (32a) and (32d), are deemed ungrammatical, but (32b), i.e. Bill said that John argued with John's mother, and (32c), i.e. Bill said that Bill argued with Bill's mother, are felicitous.

If ziji in IND-Mandarin is a shiftable indexical and obeys SHIFT TOGETHER, then the two occurrences of ziji in (33) must denote the same individual. So, Anand would predict the mixed readings (33b) and (33c) to be ungrammatical; (33) is not true even given S_2 or S_3 :

- (33) Bill_i shou John_j gei-le ziji_{i/j} ziji_{i/j}-de kaochuan. Bill say John give SELF SELF-POSS exam. 'Bill_i said that John_i...
 - a. gave him, his, exam.'
 - b. gave him, his, exam.'*
 - c. gave him, his, exam.'*
 - d. gave him, his, exam.'
- (34) The maths teacher handed over to John the exam books and asked him to distribute the exam books among his classmates. Each student should get one and the students would grade each other's exams.
 - S₁: Bill said, 'John gave me my exam.'
 - S₂: Bill said, 'John gave me his exam.'
 - S₃: Bill said, 'John gave himself my exam.'
 - S₄: Bill said, 'John gave himself his own exam.'

The predictions are not borne out, however. Each reading, even a mixed one, is accepted by at least one-third of the informants. So (33) is four-way ambiguous.

Several explanations can be lent to these findings. First, perhaps SHIFT TOGETHER does not hold for all shiftable indexicals; the constraint is a sufficient, but not a necessary condition for being shiftable indexicals. But if this is the case, we will need further evidence to show that *ziji* in IND-Mandarin is still a shiftable indexical, more or less on a par with Amharic-I and Zazaki-I. Second, it may be that SHIFT TOGETHER is a necessary and sufficient condition for indexical shift, but *ziji* is never a shifting indexical; what appears in at least some surveys as the phenomenon of SHIFT TOGETHER is the result of some other mechanism(s). This would be most detrimental to Anand's theory. A third possibility is that *ziji* is indeed a shifty indexical; but semantic overwriting is not the whole story. Perhaps semantic context overwriting is defeasible and can be overridden by other factors. When enough contextual information is available, even the ungrammatical mixed readings can be resurrected. At any rate, the

argument from SHIFT TOGETHER that *ziji* is a shiftable indexical is far from conclusive. 14,15

Before moving on, let me make two general observations. First, researchers pretty much agree that logophoricity is crucial in the analysis of *ziji*; what they differ on is the extent to which the behaviour of *ziji* is tied to logophoricity. Second, it is unanimously assumed that the logophoric *ziji* is read mandatorily *de se.*¹⁶ I now turn to analyses that take issue with these assumptions.

6.3 Ziji without de se

6.3.1 Going dynamic

Despite the prevalent presumption that logophors demand *de se* interpretation, it should be noted that Sells's (1987) original analysis of logophoricity does not make that assumption. In fact, Sells explicitly states that logophors need not trigger *de se* requirement. Crucially, Sells thinks that there is no unified account of logophoricity; rather, a logophor is linked to its long-distance antecedent if the antecedent plays at least one of the following discourse roles:

(35) Sells's logophoricity¹⁷

- SOURCE: the one who is the internal agent of the communication;
- SELF: the one whose mental state or attitude the embedded proposition describes;
- PIVOT: the one whose physical point of view against which the content of the embedded proposition is evaluated.

A logophor is bound by the person whose (a) speech or thought, (b) attitude or state of consciousness, and/or (c) point of view, or perspective, is being reported. This account of logophoricity is mostly in agreement with Hagège and Clements's original definition, but places special emphasis on what licenses the long-distance

¹⁴ E.g. in the case of multiple embedding, distance seems crucial. The further away a noun phrase is, the less likely it is to be the logophoric antecedent of *ziji*. For LOG-Mandarin, this may be construed as a preference for the closest, local binder for *ziji*. But what can be the basis for this preference in IND-Mandarin where *ziji* is simply a shifting indexical? Perhaps a syntactic analysis is not the whole story for the interpretation of *ziji*. When a concrete context is supplied, many of the syntactically prohibited readings become possible, indicating that contextual information plays a role that should not be overlooked. E.g. when my informants are given a sentence with the structure that supposedly would exhibit the blocking effect, most of them reckon the logophoric reading to be infelicitous, just as expected. However, if they are given a similar sentence with the same structure *plus* certain scenarios against which they can judge the sentence, a significant increase is seen in the number of people who judge the logophoric reading felicitous. Perhaps there is some coercion story that can be told regarding the behaviour of *ziji*.

¹⁵ See also Coppock and Wechsler, this volume, for arguments against a shiftable indexical account of the Sino-Tibetan language Newari.

¹⁶ For Huang and Liu (2001), all long-distance *ziji* and sentence-free *ziji* are logophors, and the *de se* interpretation thereof is mandatory. For Anand (2006), not all long-distance *ziji* is logophoric. What appears as long-distance binding may also be the result of indexical shift, and thus need not be *de se*. This is so because an indexical is just a parameter of the semantic evaluation sequence and need not bear a subject's reference to herself.

¹⁷ See Sells (1987: 445, 455-6).