Long-distance anaphors and the blocking effect revisited: An East Asian perspective

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Abstract

A major claim in the literature is that a distribution of anaphoric elements either obeys or disobeys locality conditions. In addition, it has long been noted that the presence of a first (or second) person pronoun intervening between Chinese *ziji* and a higher potential antecedent blocks long-distance binding. However, this paper proposes that a third person antecedent can be a blocker in a given discourse, based on Kuno and Kaburaki's (1977) system. If this is on the right track, the blocking effect in East Asian languages, especially Chinese *ziji*, Korean *caki*, and Japanese *zibun*, can be accounted for with a unified treatment.

1 Introduction

Anaphoric elements are generally claimed to fall into two types: those that obey locality conditions and those that do not. Reflexives in English and their counterparts in East Asian languages, especially Chinese, Japanese, and Korean, display characteristics of one or other type. For example, while the English reflexive *himself* can only be felicitously used when bound within the same clause, as in (1), the Chinese reflexive *ziji* in (2) can ambiguously refer to the matrix subject, the intermediate subject, or the lowest subject across the clause boundary, which has been called a long-distance anaphor.

(1) John_3 thinks Tom_5 knows Bill_7 likes $\text{himself}_{*3/*5/7}$.

(2) Zhangsan_3 renwei Lisi_5 zhidao Wangwu_7
Zhangsan think Lisi know Wangwu
xihuan $\text{ziji}_{3/5/7}$.
like self
'Zhangsan_3 thinks Lisi_5 knows Wangwu_7 likes $\text{self}_{3/5/7}$.'

(Cole et al. 1990:1)

The long-distance anaphor *ziji* also shows this seemingly idiosyncratic property in some specific contexts. The presence of a first (or second) person pronoun intervening between *ziji* and the higher potential antecedent blocks its long-distance binding, which refers to a blocking effect, as exemplified in (3).

(3) Zhangsan_3 renwei wo_5 zhidao Wangwu_7
Zhangsan think I know Wangwu
xihuan $\text{ziji}_{*3/*5/7}$.
like self
'Zhangsan_3 thinks that I_5 know that Wangwu_7 likes $\text{him}_{*3}/\text{me}_{*5}/\text{himself}_7$.'

(Cole et al. 1990:15)

(4) Chelswu_3-nun nay_5-ka $\text{caki}_{3/*5}$-lul
Chelswu-Top I-Nom self-Acc
cohaha-n-ta-ko sayngkakha-n-ta.
like-Pres-Decl-Comp think-Pres-Decl
'Chelswu_3 thinks I_5 like $\text{him}_3/\text{myself}_{*5}$.'

(Cole et al. 1990:19)

However, no comparable cases, in which a blocking effect is triggered by the presence of first (or second) person pronoun, have been reported for the Korean long-distance anaphor *caki*.[1] A question

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[1] It has long been accepted that a feature mismatch between potential antecedents does not induce the blocking effect for

30th Pacific Asia Conference on Language, Information and Computation (PACLIC 30)
Seoul, Republic of Korea, October 28-30, 2016

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arises at this point about the status of a blocking effect. Cross-linguistically, is it a universal or particular property of the languages? The purpose of this paper is to offer a unified account of long-distance anaphors including blocking effects among East Asian languages.

The organization of the paper is as follows. In section 2, I review the previous analyses of blocking effects with the long-distance binding of Chinese *ziji*. Then, in section 3, I introduce various counter-examples to the existing accounts. And in section 4, a unified account is given in order to accommodate blocking effects of Japanese *zibun* and Korean *caki*. Section 5 summarizes my findings and conclusions, with a discussion of some predictions that follow from the current analysis.

2   What has been said about blocking effects with *ziji* in Chinese

Huang and Liu (2001) argue that the blocking effect of the long-distance bound *ziji* can be attributed to the notion of logophoricity. They further reason that the blocking effect is induced in terms of conflicting perspectives, especially first or second person, when binding between *ziji* and its potential antecedents operates across an intermediate antecedent of different person, as illustrated in (5) and (6).

(5) *[3   [1   …   ziji   …   ]]

(6) *[3   [2   …   ziji   …   ]]

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the long-distance binding of Japanese *zibun*, as shown in (i) and (ii).
(i) Taroo$_3$-wa watasi$_5$-ga zibun$_{3/5}$-o sukida-to omotte-riu.
   Taroo-Top I-Nom   self-Acc like-Comp think-Pres
   'Taroo$_3$ thinks that I$_5$ like him$_3$/myself$_5$.'
(ii) John$_3$-ga   watasi$_5$-ga Bill$_7$-ni zibun$_{3/5/7}$-no sigoto-o
   John-Nom I-Nom   Bill-Dat self Gen   job-Acc
   sa-seta to   omotte-iru-
   do-Cau Comp   think-Pres
   'John$_3$ thinks that I$_5$ made Bill$_7$ do zibun$_{3/5/7}$'s work.'
                                              (Aikawa 1993:163)
However, the existence of the blocking effect of *zibun* has been reported recently by Nishigauchi (2014) while Cole et al. (1990) and Han and Storoshenko (2012) still claim that Korean *caki* is not subject to the blocking effect at all. I will return to this issue in section 3.

Huang and Liu propose, following Kuno's (1972) direct discourse representation hypothesis, that sentences containing logophoric *ziji* in reported discourse can be paraphrased in terms of direct discourse, by assuming that the source of *ziji* in indirect speech is basically equivalent to the first person pronoun *wo* 'I' in direct speech.[2] As pointed out by Clements (1975), the use of logophoric pronouns is quite similar to that of first person forms in the sense that logophoric pronouns refer to the internal speaker in reported discourse while first person pronouns refer to the external speaker in present discourse. To see how this works, consider the following examples.

(7) a. Zhangsan$_3$ juede Lisi$_5$ zai piping ziji$_{3/5}$.
      Zhangsan think Lisi at criticize self
      'Zhangsan$_3$ thinks that Lisi$_5$ is criticizing him$_3$/himself$_5$.'
   b. Zhangsan$_3$ juede, "Lisi$_5$ zai piping wo$_3$."
      Zhangsan think Lisi at criticize me
      'Zhangsan$_3$ thinks, "Lisi$_5$ is criticizing me$_3$."'
(8) a. Zhangsan$_3$ juede wo$_5$ zai piping ziji$_{*3/5}$.
      Zhangsan think I at criticize self
      'Zhangsan$_3$ thinks that I$_5$ am criticizing him$_{*3}$/myself$_5$.'
   b. Zhangsan$_3$ juede, "wo$_5$ zai piping wo$_3$".
      Zhangsan think I at criticize me
      'Zhangsan$_3$ thinks, "I$_5$ am criticizing me$_3$."'
                                  (Huang and Liu 2001:161-2)

In (7a), the logophoric *ziji* referring to the reported speaker *Zhangsan* can be turned into the first person pronoun *wo* 'I' as the actual speaker in the direct discourse, as shown in (7b), without perspective clash between *Zhangsan* and *Lisi* since they are both a third party. Thus, the logophoric use of *ziji* is licensed in the indirect discourse. On the other hand, as shown in (8b), there are two instances of the first person *wo* 'I' when the logophoric *ziji* is paraphrased in the direct discourse.

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[2] Kuno (1972) observes that the source of *zibun* in (i) is the first person pronoun *boku* in the direct representation of John's internal feeling, as shown in (ii).
(i) John$_3$-wa, Mary$_5$-ga zibun$_3$-o mita toki-wa   byooki datta.
   John-Top Mary-Nom self   saw when-Top sick   was
   'John$_3$ was sick when Mary$_5$ saw him$_3$.'
(ii) John: "Boku-wa Mary-ga   boku-o mita toki-wa
         I-Top   Mary-Nom I-Acc   saw when-Top
         byooki datta."
   'I was sick when Mary saw me.'
                                              (Kuno 1972:180-1)

The two *wo* 'I' are anchored in different sources, namely the external speaker and the internal speaker *Zhangsan* respectively and such a reading is not acceptable due to the perspective conflict it would cause. This is the reason Huang and Liu give to explain why a logophoric reading of *ziji* is blocked.

In addition, Pan (2001) claims that the blocking effect of *ziji* is not symmetrical in that intervening first and second person pronouns may block third person potential antecedents from long-distance binding *ziji*, while third person potential antecedents do not necessarily block first or second person pronouns from long-distance binding *ziji*. Here are the relevant judgments.

(9) a. Wo_3 bu xihuan $Lisi_5$ guan $ziji_{3/5}$
   I not like Lisi interfere self
   de shi.
   DE matter
   'I_3 don't like $Lisi_5$ interfering in my$_3$ (own) business.'

   b. $Lisi_3$ bu xihuan wo_5 guan $ziji_{*3/5}$
   Lisi not like I interfere self
   de shi.
   DE matter
   '$Lisi_3$ does not like me$_5$ interfering in my$_5$ (own) business.'

(Pan 2001:283)

The first person pronoun as the matrix subject in (9a) is a possible antecedent. However, in (9b), the third person *Lisi* in the matrix subject position is excluded from being a candidate of long-distance antecedents in such a sentence because of a conflicting feature agreement. Hence, a logophoric reading of *ziji*, in Huang and Liu's (2001) system[3], is blocked here.

3   Another type of blocker

As already pointed out above, the canonical view on blocking effects of Chinese *ziji* has been accounted for in terms of either presence or absence of person feature agreement. In particular, a first or second person pronoun induces blocking effects, but not a third person pronoun. However, a closer look reveals a much different situation, as shown in (2) and (3), repeated below.

(10) $Zhangsan_3$ renwei $Lisi_5$ zhidao $Wangwu_7$
   Zhangsan think Lisi know Wangwu
   xihuan $ziji_{3/5/7}$.
   like self
   '$Zhangsan_3$ thinks $Lisi_5$ knows $Wangwu_7$ likes self$_{3/5/7}$.'

(11) $Zhangsan_3$ renwei wo_5 zhidao $Wangwu_7$
   Zhangsan think I know Wangwu
   xihuan $ziji_{*3/*5/7}$.
   like self
   '$Zhangsan_3$ thinks that I_5 know that $Wangwu_7$ likes him$_{*3}$/me$_{*5}$/himself$_7$.'

All the candidates of long-distance binding in (10) are a third person and there is no blocking effect. On the other hand, there is a person feature disagreement among the candidates in (11) and it would give rise to the blocking effect. Obviously, however, the blocker is not the first person pronoun *wo* 'I' but the third person proper noun *Wangwu*.[4] Let us look at the following contrast.

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[3] Contrary to what Huang and Liu argue, Pan (2001:290) points out that the logophoric interpretation cannot properly accommodate the peculiar properties of long-distance bound *ziji* including the blocking effect. The following evidence seems to point in that direction.
(i) $Kofi_3$ nya be me_5-kpɔ $yè_3$.
   Kofi know Comp Pro-see Log
   '$Kofi_3$ knew that I_5 had seen him$_3$.'   (Clements 1975: 170)
As we can see above, the blocking effect does not occur in logophoric environments at all. See Park (2015b) for further discussion.

[4] There has been a great diversity of opinion about what really triggers the blocking effects in the long-distance binding of *ziji*. Many authors agree that blocking can be induced entirely by the existence of an intervening first or second person pronoun, but not a third person antecedent. However, how can we explain what is different between the following sentences.
(i) $Zhangsan_3$ cong $Lisi_5$ nar tingshuo naben shu
   Zhangsan from Lisi there hear that-CL book
   hai-le $ziji_{3/*5}$.
   hurt-Perf self
   '$Zhangsan_3$ heard from $Lisi_5$ that that book hurt him$_{3/*5}$.'
(Pan 2001:291)
(ii) $Zhangsan_3$ cong wo_5 nar tingshuo $ziji_{3/*5}$ de erzi
   Zhangsan from I there hear self DE son
   de-le jiang.
   get-Pref prize
   '$Zhangsan_3$ heard from me$_5$ that his$_3$/my$_{*5}$ son didn't win the prize.'
The first person pronoun *wo* 'I' in (ii) looks the same as the third person *Lisi* yet does not act as blocker for the long-distance binding of *ziji* in (i).

(12) Zhangsan₃ renwei wo₅ zhidao Wangwu₇
Zhangsan think I know Wangwu
xihuan ziji∗₃/??₅/₇.
like self
'Zhangsan₃ thinks that I₅ know that Wangwu₇
likes him∗₃/me??₅/himself₇.'
(13) Zhangsan₃ renwei Wangwu₅ zhidao wo₇
Zhangsan think Wangwu know I
xihuan ziji∗₃/∗₅/₇.
like self
'Zhangsan₃ thinks that Wangwu₅ knows that I₇
like him∗₃∗₅/myself₇.'

(Cole et al. 2006:63)

The biggest difference between (12) and (13) is the fact that the third person antecedent *Wangwu* blocks the first person pronoun *wo* 'I' from binding *ziji* in (12) while a first person antecedent does in (13). To be more exact, the blocker of the long-distance binding in (12) is the third person *Wangwu* and the same role in (13) is carried by the first person pronoun *wo* 'I'. If this account is on the right track, the approach that long-distance binding of *ziji* is blocked exclusively by the presence of a first or second person needs to be reviewed. Here are the relevant data.

(14) Zhangsan₃ zhidao Lisi₅ gaosu-guo ni₇
Zhangsan know Lisi tell-Guo you
youguan ziji∗₃/₅/∗₇ de gongzuo.
about self DE work
'Zhangsan₃ knew that Lisi₅ told you₇ about
his∗₃/₅your∗₇ work.'
(15) Zhangsan₃ shuo Lisi₅ gen ni₇ tan-guo
Zhangsan say Lisi with you talk-Guo
ziji∗₃/₅/∗₇ de shi.
self DE business
'Zhangsan₃ said that Lisi₅ talked about
his∗₃/₅your∗₇ business with you₇.'
(16) Zhangsan₃ renwei Lisi₅ cong wo₇ nar
Zhangsan think Lisi from I there
tingshuo-le ziji∗₃/₅/∗₇ de fenshu.
hear-say-Perf self DE score
'Zhangsan₃ thinks Lisi₅ heard from me₇
his∗₃/₅my∗₇ score.'
(17) Zhangsan₃ zhidao Lisi₅ zai wo₇ jia xi
Zhangsan know Lisi at I home develop
ziji∗₃/₅/∗₇ de zhaopian.
self DE photo
'Zhangsan₃ knew that Lisi₅ was developing
his∗₃/₅my∗₇ picture(s) at my home.'

As we can see in (14) through (17), the first and second person pronouns cannot bind *ziji* whereas the intermediate antecedent can. Nonetheless, that they have been treated as blocking elements is not reasonable. The following example is acceptable as well.

(18) Zhangsan₃ cong wo₅ nar tingshuo
Zhangsan from I there hear-say
laoshi₇ ma-le ziji₃/∗₅/₇.
teacher criticize-Perf self
'Zhangsan₃ heard from me₅ that the teacher₇
criticized him₃/me∗₅/himself₇.'

In (18), *ziji* can be bound by both third person antecedents, but not by the first person pronoun.

Huang and Liu (2001) have argued that licensing long-distance binding in Chinese is characterized as the logophoric use of *ziji* and thus the blocking effect can be accounted for by means of logophoric effects such as Kuno's direct discourse representation hypothesis as the logophoric pronoun *yè* in Ewe is generally used in reported context while it is replaced by a first person form in direct speech. However, there is no logophoric effect in (19).⁵

(19) Zhangsan₃ de biaoqing gaosu wo₅
Zhangsan DE expression tell me
ziji₃/∗₅ shi guwude.
self is innocent
'Zhangsan's₃ expression tells me₅ that he₃/I∗₅
am innocent.'

(Cole et al. 2006:37)

In (19), not only can *ziji* refer to the matrix subject over the intervening first person pronoun but it also occurs in the absence of a logophoric environment.

Besides, third person interveners may serve as a blocker, as shown in (21).

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⁵ An anonymous reviewer pointed out that grammaticality of the antecedents of the anaphors in sentences (19) through (26) can be influenced by the predicates. I definitely agree with the reviewer's comment that the predicate semantics should be considered in the analysis. Nonetheless, I would argue that the verbs used in those examples are utterance verbs, as in (19) through (25), and an attitude verb, as in (26), which makes attitude holders to serve as the antecedent of logophors in the embedded clauses.

(20) Mama₃ shuo jia   chuqu-de nüer₅
     mother say marry go.out-DE daughter
     yijing hui lai ziji₃/*₅-de jia   le.
     already return come self-DE   home Asp
     'Mother₃ said that the married daughter₅ had
       already come back to her₃/*₅ home.'

(21) Mama₃ shuo jia   chuqu-de nüer₅
     mother say marry go.out-DE daughter
     yijing hui qu ziji*₃/₅-de jia   le.
     already return go self-DE   home Asp
     'Mother₃ said that the married daughter₅ had
       already gone back to her*₃/₅ home.'

                                    (Liu 1999:39)

The lower subject *nüer* 'daughter' in (21) can
be reported by the external speaker as the empathy
locus, in Kuno and Kaburaki's (1977) system, to
which deictic elements such as 'come' and 'go'
should refer.[6] Only *nüer* 'daughter' in this case, not
mama 'mother', can be the antecedent for *ziji* and
thus blocks long-distance binding *mama* 'mother',
which means that the *nüer* 'daughter' functions as
a blocker. The same situation occurs in Korean and
Japanese, as shown in (22) through (25).

(22) Emeni₃-nun sicip-ka-n   ttal₅-i
     mother-Top marry-go.out-Adn daughter-Nom
     caki₃/*₅ cip-ulo tola-o-ass-tako
     self   home-to return-come-Past-Comp
     malha-yss-ta.
     say-Past-Decl
     'Mother₃ said that the married daughter₅ had
       already come back to her₃/*₅ home.'

(23) Emeni₃-nun sicip-ka-n   ttal₅-i
     mother-Top marry-go.out-Adn daughter-Nom
     caki*₃/₅ cip-ulo tola-ka-ass-tako
     self   home-to return-go-Past-Comp
     malha-yss-ta.
     say-Past-Decl
     'Mother₃ said that the married daughter₅ had
       already gone back to her*₃/₅ home.'

(24) Haha₃-wa yomeni itta   musume₅-ga
     mother-Top marry   go.out daughter-Nom

zibun₃/*₅-no ie-ni   modotte ki-ta-to
self-Gen   home-to return.come-Past-Comp
hanasi-ta.
say-Past
'Mother₃ said that the married daughter₅ had
  already come back to her₃/*₅ home.'

(25) Haha₃-wa yomeni itta   musume₅-ga
     mother-Top marry   go.out daughter-Nom
     zibun*₃/₅-no ie-ni   modotte it-ta-to
     self-Gen   home-to return.go-Past-Comp
     hanasi-ta.
     say-Past
     'Mother₃ said that the married daughter₅ had
       already gone back to her*₃/₅ home.'

The blocking effect related to an empathy locus
is also found in the environments with clausemate
long-distance anaphors, as pointed out by Huang
and Liu (2001) and Cole et al. (2006). Here is the
example.[7]

(26) Zhangsan renwei Lisi zhidao Wangwu
     Zhangsan think Lisi know Wangwu
     ba ziji₁ de shu song-gei-le
     BA self DE book give-to-Perf
     Ziji₂ de   pengyou.
     self DE friend
     'Zhangsan thinks that Lisi knows that
       Wangwu gave self's books to self's friends.'
                             (Cole et al. 2006:61)

In (26), there are two occurrences of long-distance
ziji, *ziji*'s books and *ziji*'s friends, in the same
clause. The two *ziji*s referring to the books and the
friends should be bound to the same antecedent.
Thus, the sentence can only mean that Zhangsan
thinks that Lisi knows that Wangwu gave Zhang-
san's book to Zhangsan's friends, or that Zhangsan
thinks that Lisi knows that Wangwu gave Lisi's
books to Lisi's friends.[8] Either way, the blocker
will be a third person referent. This kind of block-
ing effect can be seen in Japanese and Korean as
well, as shown in (27) and (28) respectively.

(27) Naomi₃-wa Ken₅-ga zibun-no kuruma-de
     Naomi-Top Ken-Nom self-Gen car-by

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[6] Liu (1999:39-40) claims that the contrast between (20) and
(21) can be accounted for in terms of one of logophoric effects
like PIVOT in Sells' (1987) term. However, this paper, along
the lines of Oshima (2004, 2007), argues that long distance
bindings in East Asian languages, especially of Chinese *ziji*,
Korean *caki*, and Japanese *zibun*, should be accounted for by
the notions of logophor and empathy.

[7] This example was first discovered by Pan (1997).
[8] It can be explained in terms of Kuno's (1987:207) Ban on
Conflicting Empathy Foci: A single sentence cannot contain
logical conflicts in empathy relationships.

zibun-no ie-ni   kaetta   to   itta.
self-Gen home-to returned Comp said
'Naomi₃ said that Ken₅ had returned to her₃ home in her₃ car.'

'Naomi₃ said that Ken₅ had returned to his₅ home in his₅ car.'

*'Naomi₃ said that Ken₅ had returned to his₅ home in her₃ car.'

*'Naomi₃ said that Ken₅ had returned to her₃ home in his₅ car.'   (Iida 1996:81)

(28) John-i₃   Bill-i₅   caki-uy emma-ka
John-Nom Bill-Nom caki-Gen mother-Nom
caki-lul silhehanta-ko sayngkakhanta-ko
self-Acc hate-Comp   think-Comp
malhayssta.
said
'John₃ said that Bill₅ thought that his₃ mother hates him₃.'

'John₃ said that Bill₅ thought that his₅ mother hates him₅.'

*'John₃ said that Bill₅ thought that his₃ mother hates him₅.'

*'John₃ said that Bill₅ thought that his₅ mother hates him₃.'   (Park 2014)

4   Blocking effect revisited

As described in the preceding section, what licenses the long-distance binding, in Huang and Liu's (2001) system, is the logophoric reading of *ziji* and the existence of the blocking effect is caused by the result of the shifting of long-distance bound *ziji* from the speaker-referring *wo* 'I' in the direct discourse. The examples between (7) and (8) illustrate this claim, repeated below.

(29) a. Zhangsan₃ juede Lisi₅ zai piping ziji₃/₅.
Zhangsan think Lisi at criticize self
'Zhangsan₃ thinks that Lisi₅ is criticizing him₃/himself₅.'

b. Zhangsan₃ juede, "Lisi₅ zai piping wo₃."
Zhangsan think Lisi at criticize me
'Zhangsan₃ thinks, "Lisi₅ is criticizing-me₃."'

(30) a. Zhangsan₃ juede wo₅ zai piping ziji*₃/₅.
Zhangsan think I at criticize self
'Zhangsan₃ thinks that I₅ am criticizing him*₃/myself₅.'

b. Zhangsan₃ juede, "wo₅ zai piping wo₃".
Zhangsan think I at criticize me
'Zhangsan₃ thinks, "I₅ am criticizing me₃."'

(Huang and Liu 2001:161-2)

Huang and Liu consider that two instances of *wo* 'I' occurring in the same clause would refer to two different individuals, either the reporter or the internal speaker and thus it can result in a blocking effect. However, as pointed out by Chen (2009), actually their analysis induces a distortion of the truth-condition content of the source sentence, as shown in (31).

(31) a. Zhangsan₃ juede, "Lisi₅ zai piping wo₃".
Zhangsan think Lisi at criticize I
'Zhangsan₃ thinks, "Lisi₅ is criticizing me₃."'

b. Zhangsan₃ juede, "ni₅ zai piping wo₃".
Zhangsan think you at criticize I
'Zhangsan₃ thinks, "You₅ are criticizing me₃."'

c. Zhangsan₃ juede, "ta₅ zai piping wo₃".
Zhangsan think he at criticize I
'Zhangsan₃ thinks, "He₅ is criticizing me₃."'
(Chen 2009: 477-8)

Presumably, a logophoric *ziji* can be paraphrased by using a first person pronoun *wo* 'I' in the direct discourse such as (30b), (31a), (31b), and (31c) but a first person in the reported discourse should also be replaced by an individual referring to an external speaker such as *Lisi* in (31a), *ni* 'you' in (31b), *ta* 'he' in (31c), not *wo* 'I' in (30b). Intuitively, this is correct. Here is the relevant judgment in Ewe.

(32) a. Kofi₃ gblɔ na wo₅ be yè₃–a-dyi
Kofi speak to Pro that Log-T-seek
ga-a   na wo₅
money-D for Pro
'Kofi₃ said to them₅ that he₃ would seek the money for them₃.'

b. Kofi₃ gblɔ na wo₅ be: ma-dyi
Kofi speak to Pro that Pro-seek
ga-a   na mi
money-D for Pro
'Kofi₃ said to them₅: "I'll seek the money for you."'   (Clements 1975: 152)

The second person plural pronoun *mi* 'you' in the direct discourse, as in (32b), is replaced by the third person plural form *wo* 'them' in the reported speech, as in (32a) even though the logophoric pronoun *yè* is replaced by the first person pronoun

ma 'I' in the direct speech. Hence, the reconstruction of Huang and Liu shown in (30b) is not appropriate.

This would correspond precisely to the logophoric reading of Japanese *zibun*, as illustrated in (33).

(33) a. ?*Taroo₃-wa   boku₅-ga zibun₃-ni
         Taroo-Top   I-Nom   slef-Dat
         o-kane-o   kasi-te kure-ta   koto-o
         money-Acc lend   Benef-Past that-Acc
         sukkari   wasure-ta rasii.
         completely forget-Past seem
         'Taroo seems to have completely forgotten that I had done favor to loan self money.'
     b. Taroo: "Takasi-ga   boku-ni o-kane-o
        Taroo: Takashi-Nom I-Dat   money-Acc
        kasi-te kure-ta."
        lend   benef-Past
        'Taroo: "Takashi did the favor of lending me money."'
                                    (Nishigauchi 2014: 199)

The first person pronoun *boku* 'I' of the reported discourse in (33a) is derived from the third party *Takashi*, the external speaker, with respect to the virtual speaker, using Huang and Liu's (2001) term, *Taroo* in (33b), not the first person pronoun. Thus, there are not two occurrences of the first person pronoun *wo* 'I', contrary to Huang and Liu's claim.

Additionally, it would be no surprise that a logophoric pronoun does not exhibit the blocking effect, since a logophoric pronoun obligatorily denotes the attitude holder that serves as its referent in the scope of an attitude predicate and since the antecedent of a logophoric pronoun is strictly restricted to third persons. Here are the relevant examples, repeated below from footnote 3.

(34) Kofi₃ nya   be   me₅-kpɔ yè₃.
     Kofi know Comp Pro-see Log
     'Kofi₃ knew that I₅ had seen him₃.'
                              (Clements 1975: 170)
(35) Me₃-se tso Kofi₅ gbɔ be   yè₅-xɔ
     Pro-hear from Kofi side that Log-receive
     nunana.
     gift
     'I₃ heard from Kofi₅ that he₅ had received a gift.'   (Clements 1975: 158)

The first person pronoun *me* 'I' in (34) cannot block the third person matrix subject *Kofi* from binding *yè*. On the other hand, the first person pronoun *me* 'I' as the matrix subject in (35) cannot be bound by the logophoric pronoun *yè*. The examples of Korean counterparts below demonstrate convincingly that the property of a logophoric pronoun is not related to a blocking effect.

(36) Chelswu₃-nun nay₅-ka caki₃/*₅-lul
     Chelswu-Top I-Nom   self-Acc
     po-n-kes-ul   al-ass-ta.
     see-Adn-Comp-Acc know-Past-Decl
     'Chelswu₃ knew that I₅ had seen him₃/myself*₅.'
(37) Na₃-nun Chelswu₅-lopwute caki*₃/₅-ka
     I-Top   Chelswu-from   self-Nom
     senmwul-ul pat-ass-tako
     gift-Acc   receive-Past-Comp
     ttul-ess-ta.
     hear-Past-Decl
     'I₃ heard from Chelswu₅ that *I₃/he₅ had received a gift.'

As a matter of fact, the first person pronoun in Chinese does not always serve as a blocker against long-distance binding in a given context, as shown in (38).

(38) Lisi₃ shengpa wo₅ chaoguo ziji₃/*₅.
     Lisi worry   I   surpass self
     'Lisi₃ was afraid that I₅ would surpass him₃/myself*₅.' (Pollard and Xue 2001: 321)

In (38), *ziji* can take the matrix subject *Lisi* as its antecedent rather than the first person pronoun *wo* 'I' within the same clause. This is because *Lisi* here is the attitude holder that serves as the antecedent of logophoric *ziji* in the scope of an attitude predicate. At this point, it should be noted that a logophoric reading can co-occur with a first person pronoun, as illustrated in (39) through (41), respectively Ewe, Japanese, and Korean.

(39) Ama₃ se   be   me₅-kpɔ yè₃ le asi-a   me.
     Ama hear that Pro-see Log at market-D in
     'Ama₃ heard that I₅ had seen her₃ at the market.'   (Clements 1975: 158)
(40) Taroo₃-wa boku₅-ga zibun₃-o but-ta
     Taroo-Top I-Nom   self-Acc hit-Past

koto-o   mada urande-i-ru.
fact-Acc still   resent-Asp-Pres
'Taroo₃ still resents that I₅ hit him₃.'

<div style="text-align:right">(Kuno 1978: 212)</div>

(41) Chelswu₃-nun nay₅-ka caki₃/*₅-lul
Chelswu-Top I-Nom   self-Acc
piphanha-yess-tako   sayngkakha-n-ta.
criticize-Past-Comp   think-Pres-Decl
'Chelswu₃ thinks that I₅ criticized him₃/*myself₅.'

On the other hand, an empathic reading of long-distance binding can exhibit the blocking effect[9], as shown in (42) and (43), respectively Japanese and Korean.

(42) *Taroo₃-wa boku₅-ga   zibun₃-ni kasi-ta
Taroo-Top I-Nom   self-Dat lend-Past
okane-o   nakusite-simat-ta rasii.
money-Acc lose-end.up-Past it.seems
'It seems that Taroo₃ lost the money I₅ lent to him₃.'   (Kuno 1978: 213)

(43) *Hyengsa₃-nun nay₅-ka caki₃ pwumo-lul
detective-Top I-Nom self parents-Acc
salhayha-n phaylyunpem-i-lako
kill-Adn   reprobate-being-Comp
sayngkakha-n-ta.
think-Pres-Decl
'The detective₃ thinks that I₅ am a reprobate who killed his (*the detective's₃) parents.'   (Park 2015a: 193)

It is worth noting that there is no attitude holder associated with the reported attitude in (42). Moreover, the empathic use of long-distance binding can empathize with the person in a given context in terms of the external speaker even in the attitude report, such as (43).[10] These observed facts seem to

indicate that logophoric use of long-distance binding does not exhibit the blocking effect. The relevant data from Chinese support this claim.

(44) Ta₃ shuo ni₅   mingming zhidao Mary₇
he   say   you   clearly   know Mary
bu hui xihuan ziji₃/₅/₇.
not will like   self
'He₃ said you₅ knew clearly that Mary₇ wouldn't like him₃/you₅/herself₇.'
<div style="text-align:right">(Xu 1993:136)</div>

(45) Zongtong₃ qing wo₅ zuo zai ziji₃/*₅
president ask I   sit at self
de   shenbian.
DE   side
'The president₃ asked me₅ to sit beside him₃/himself*₅.' (Pollard and Xue 2001: 321)

In (44), there is no blocking effect in spite of the mismatch of person features among the subjects of the three clauses. In addition, (45) shows that not only does *ziji* not occur in the scope of an attitude predicate at all, there is no blocking effect either.

5   Conclusion

Huang and Liu (2001) have argued that the blocking effect of long-distance binding in Chinese can be accounted for in terms of logophoricity and the direct discourse representation hypothesis. Furthermore, they claim that the mismatch of person features among possible antecedents induces the blocking effect. However, this paper proposes that a third person, in addition to a first or a second person, can be an antecedent and that the blocking effect is closely related to empathic use of long-distance anaphors, especially in East Asian languages such as Chinese, Korean and Japanese.

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[9] Empathy theory in linguistics was first introduced by Kuno and Kaburaki (1977:628). The key notion of empathy is defined as follows:

(i) 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.

To capture how the empathic use of Japanese *zibun* works in a sentence, see Oshima (2007). It is beyond the scope of this paper to explain how the alternative solution through empathy works with respect to a blocking effect of long-distance anaphors and the relationship, as an anonymous reviewer pointed out, between logophors and indexicals. I leave these issues to future research.

[10] An anonymous reviewer suggests that long-distance *ziji* is, or has a use as, a logophor and the felicitous use of *ziji* as a

logophor is constrained by the factor of empathy. However, the domain of empathic use in long-distance binding should, I think, be separated from that of logophoric use even though empathic use occasionally overlaps the logophoric use in logophoric environments, as the Korean example in (43). Furthermore, given *ziji* is only characterized as a logophor, the following example cannot be appropriately accounted for by means of logophoricity.

(i) John₃ mingling Bill₅ [S PRO gei ziji₃/₅ guahuzi].
John order   Bill   to self shave
'John₃ ordered Bill₅ to shave him₃/himself₅.'
<div style="text-align:right">(Pan 2001: 291)</div>

Acknowledgements

I am grateful to the three anonymous reviewers of PACLIC 30 for their helpful comments and suggestions on the earlier version of the paper. All the remaining errors are, of course, my own.

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