

Perspective on Korean Anaphors: Comparing Inanimate *cachey* vs. Animate *caki-casin*

Dorothy Ahn and Isabelle Charnavel

1. Introduction

While anaphors are usually analyzed as requiring local binders (Condition A, see Chomsky 1986, a.o.), some instances of anaphors in many languages do not need local, c-commanding antecedents. This raises the issue of how to empirically distinguish between instances of anaphors subject to Condition A and instances of anaphors exempt from it: the boundary between the two cases is hard to draw given that this requires simultaneously knowing how to define Condition A and how to formulate the conditions for being exempt from it.

Many studies suggest that the conditions for exemption from Condition A are related to perspective, or so-called logophoricity (Clements 1975, Kuno 1987, Sells 1987, Pollard and Sag 1992, Huang and Liu 2001, Charnavel 2014, a.o.). Specifically, the antecedents of anaphors that are exempt from Condition A refer to individuals whose perspective is reported in the sentence. However, exactly how and why this correlation holds remains unclear.

The goal of this paper is to study such perspectival effects on Korean anaphors focusing on the inanimate anaphor *cachey* and the animate anaphor *caki-casin*, which has recently been argued to be an anaphor that can be exempt from Condition A (Kim and Yoon 2009). We use grammaticality judgment scores collected in a systematically controlled experiment to compare the behavior of the two anaphors.

In order to define Condition A independently of potential perspectival effects, we first examine the distribution of inanimate *cachey* to determine the binding domain in Korean (i.e. we use the inanimacy strategy introduced in Charnavel and Sportiche 2016). Then, we compare it with the distribution of the animate anaphor *caki-casin* by crucially contrasting cases where the antecedent is a logophoric center with cases where it is not. The results of our experimental studies show that exempt *caki-casin* is significantly more acceptable in logophoric conditions – specifically in attitude and empathy contexts – confirming that logophoricity plays a crucial role in licensing exempt anaphors.

2. Delimiting Condition A in Korean: inanimate *cachey*

2.1. Theoretical background: Inanimacy and Condition A

Before investigating the effect of perspective in licensing Korean exempt anaphors, we must first determine the scope of Condition A in Korean independently. We do this by making use of the inanimacy strategy proposed in Charnavel and Sportiche 2016. While it is now widely accepted that anaphors can be exempt from Condition A when logophoric (see references above), there is no consensus on the exact definition of logophoricity or perspective. However, one thing that crucially holds is that inanimates cannot be perspective holders since they lack a mental state. Therefore,

*Dorothy Ahn, Harvard University, dorothyahn@g.harvard.edu. Isabelle Charnavel, Harvard University, icharnavel@fas.harvard.edu. We would like to thank the audiences of TEAL10, GLOW39 and WCCFL34 for interesting questions and comments, as well as 77 native speakers of Korean for their participation in our experiments during the winter 2014. This work has been supported by the National Science Foundation under grant 1424054: “Collaborative Research: Typology and Theory of Anaphora”, PI: Isabelle Charnavel (in collaboration with Dominique Sportiche’s grant #1424336).

Abbreviations used in the paper: TOP (topic), GEN (genitive), INST (instrumental), ACC (accusative), NOM (nominative), DECL (declarative), RC (relative clause), ASP (aspect), COMP (complementizer), LOC (locative).

inanimate anaphors cannot be exempt: inanimacy is a sufficient condition for being a plain (i.e. non-exempt) anaphor. Investigating the distribution of an inanimate anaphor thus allows us to identify the scope of Condition A without the confound of logophoricity.

Drawing on this idea, we examined the distribution of the understudied inanimate anaphor *cachey* to define the relevant notion of locality for Condition A in Korean.¹ Given the different definitions proposed for Condition A in the literature, this involved testing configurations where we varied the relative positions of the anaphor and the antecedent in several relevant ways explained below and detailed in the next subsection.

First, all definitions of Condition A ultimately assume that the anaphor must be bound, i.e. c-commanded, by its antecedent. Accordingly, we checked whether the antecedent has to c-command *cachey*. Furthermore, all formulations of Condition A suppose that the antecedent should appear in a domain that is local relative to the anaphor. But the definition of that domain is subject to variation.

According to Chomsky's (1986) definition of Condition A, an anaphor must be bound by its antecedent within the smallest XP containing it and a subject distinct from it. This means that locality basically amounts to the absence of a subject intervening between the antecedent and the anaphor; this is sometimes (see Kim and Yoon 2009) referred to as the Specified Subject Condition (SSC, inspired by, but different from, the condition described in Chomsky 1973). We tested for the (im)possibility of SSC violation by comparing configurations where the anaphor and the antecedent are within the same clause and configurations where the anaphor is in a subordinate clause and is separated from the antecedent sitting in the matrix clause by the subject of the subordinate clause.

According to predicate-based theories (Pollard and Sag 1992, Reinhart and Reuland 1993, a.o.), on the other hand, locality boils down to coargumenthood: the antecedent of an anaphor must not only be within its smallest XP, but must also be its coargument. We tested this hypothesis comparing cases where the anaphor anteceded by a subject is the object of the clause (i.e. coargument of the subject) and cases where it is (within) an adjunct or within the object (i.e. non-coargument of the subject).

Other studies add an absolute locality requirement to such relative ones: the antecedent must not only be within the same XP as the anaphor with no subject intervening (or alternatively, be its coargument), but also within the smallest tensed clause containing the anaphor: tensed TP is an absolute boundary that cannot separate the anaphor and its antecedent. This is sometimes (see Kim and Yoon 2009) referred to as the Tensed-S Condition (TSC, inspired by, but different from, the condition described in Chomsky 1973). Charnavel and Sportiche (2016) show that TSC cannot be violated for French anaphors, which leads them to formulate Condition A in terms of Phase Theory. Kim and Yoon (2009) assume that TSC violation is possible for Korean *caki-casin* based on Huang and Liu's (2001) observation about Mandarin plain anaphors. However, the results of their study (which we will further discuss in Section 3.1) lead Kim and Yoon (2009) to question this assumption. We tested the (im)possibility of TSC violation for *cachey* using configurations that involve an anaphor in a complement clause anteceded by the matrix subject, and comparing cases where the anaphor is (within) the subject of the subordinate clause and cases where it is (within) its object.

We present our studies below. The upshot is that *cachey* is subject to the c-command requirement, the SSC, and the TSC, but not to coargumenthood: in short, *cachey* conforms to Charnavel and Sportiche's (2016) definition of Condition A, according to which a plain anaphor and its binder must be in the smallest XP containing both without an intervening subject and no larger than a tensed TP.

2.2. Experimental study: Distribution of *cachey*

Thirty-nine native Korean speakers were asked to perform grammaticality judgment tasks online (on Qualtrics) on 54 randomly ordered sentence items based on a 6-point Likert scale. All sentences contained the anaphor *cachey* and its antecedent in various positions for the reasons explained above. The items were divided into three main groups which we call A, B, and C. Group A contained sentences where *cachey* had a clausemate, c-commanding antecedent; subgroups distinguished

¹ In addition to the anaphoric use, *cachey* has an intensifier use like English *itself*. While emphatic *cachey* can be attached to animate DPs, its anaphoric use is strictly restricted to inanimate referents.

between *cachey* in coargumental positions and *cachey* in non-coargumental positions, as illustrated in (1a) and (1b) below:

- (1) a. Group A (clausemateness + c-command) with no coargumenthood
 [i senpak]_i-un cachey_i-uy chwucinlyek-ulo wumcikil swu-iss-ta.
 this ship-TOP self-GEN momentum-INST move able-DECL
 ‘[This ship]_i can move using its_i momentum.’ [5.67/6]
- b. Group A (clausemateness + c-command) with coargumenthood
 cikwu_i-nun cachey_i-lul tollin-ta.
 earth-TOP cachey-ACC spin-DECL
 ‘[The earth]_i spins (on) itself_i.’ [4.29/6]

In Group B, the antecedent of *cachey* was within the same clause as *cachey* but not c-commanding it.

- (2) Group B (clausemateness + no c-command)
 *[i kwail]_i-uy caypayca-nun cachey_i-uy khentisyen-ul cacwu hwakinhan-ta.
 this fruit-GEN grower-TOP self-GEN condition-ACC often check-DECL
 ‘[This fruit]_i’s grower often checks its_i condition.’ [1.97/6]

Finally, Group C contained bi-clausal sentences with *cachey* in the embedded clause and its (c-commanding) antecedent in the matrix clause. This group crucially included cases where the anaphor is (within) the subject of the embedded clause and cases where it is (within) the object of the embedded clause as shown in (3a) and (3b), respectively.

- (3) a. Group C (TSC-violation + c-command) with no SSC violation:
 *[i sose]_i-un [cachey_i-uy ceca]-ka thulawuma-lul kackoissta-nun
 this novel-TOP self-GEN author-NOM trauma-ACC have-RC
 kes-ul poyecwun-ta.
 fact-ACC show-DECL
 ‘[This novel]_i shows that its_i author suffers from a trauma.’ [2.95/6]
- b. Group C (TSC-violation + c-command) with SSC violation:
 *kwail_i-un [tongmwultul-i cachey_i-uy kwayuk-ul meknunta]-nun
 fruit-TOP animals-NOM self-GEN pulp-ACC eat-RC
 cangcem-ul kackoissta.
 advantage-ACC have
 ‘The fruit_i has the advantage that animals eat its_i own pulp.’ [2.66/6]

The average ratings of the sentences in Groups A, B, and C are shown in Table 1 below:

Table 1

Condition	A		B	C	
	coargument	non-coargument		no SSC violation	SSC violation
Ratings	4.43	4.97	2.452	3.303	3.25

Group A was rated significantly higher than group B ($p < 0.0001$) and group C ($p < 0.0001$), confirming that c-command and locality are required for the antecedent of *cachey*.² Furthermore, there was no significant difference between subgroups within group A and within group C. This suggests that coargumenthood is not relevant for *cachey* binding, but subject intervention is, and that the tensed clause is an absolute boundary between *cachey* and its antecedent, thus corroborating Kim and Yoon’s (2009) findings about the exempt status of Korean anaphors violating TSC. In sum, we can apply to

² The slightly archaic nature of *cachey* may explain why scores never attain the maximal value (i.e. 6). But as standard, we here focus on contrasts, which are more informative than absolute scores.

Korean anaphors Charnavel and Sportiche's (2016) formulation of Condition A, which defines locality in terms of c-command, absence of subject intervention, and absence of tensed clause boundary.

3. Perspective-based exemption from Condition A in Korean: animate *caki-casin*

With the baseline of Condition A set for Korean with the inanimate anaphor *cachey*, we go on to investigate the distribution of the animate anaphor *caki-casin*. The goals of our second experimental study were two-fold: first, we wanted to verify that *caki-casin* can indeed be an exempt anaphor as argued by Kim and Yoon (2009) against traditional assumptions; the second goal was to inquire into the precise role of logophoricity in exempting *caki-casin* from Condition A.

3.1. Kim and Yoon's (2009) study

While traditional analyses assume that the complex anaphor *caki-casin* is a strictly local anaphor as opposed to the simplex anaphors *caki* and *casin*, Kim and Yoon's (2009) study reveals that *caki-casin* can be long-distance bound under logophoric conditions.³

This interesting result is however undermined by some issues in the study. First, Kim and Yoon (2009) treat TSC-violation cases, i.e. configurations where *caki-casin* is separated by its antecedent by a tensed clause boundary, as local binding. As exemplified in (4a) and (4b), they compare cases where the anaphor is (within) the subject of its tensed clause (no SSC violation) and cases where it is (within) its object (SSC violation), based on the assumption that the former are cases of local binding. They examine the two cases by collecting grammaticality judgment scores of such sentences and by probing into strict and sloppy readings of immediately following sentences containing VP-ellipsis (such as the bracketed sentence in 4b), based on the assumption that the availability of strict readings diagnoses exemption from Condition A (Cole et al. 2006, a.o.).

(4) a. Only TSC violation:

Jieuni _i -ka	Sanghoon-eykey	[ipen hakki-cy-nun	caki-casin _i -i	kkok
Jieuni-NOM	Sanghoon-DAT	this semester-LOC-TOP	self-NOM	for.sure
iltung-ul	ha-lke-la-ko]	malhay-ss-ta]-ko	na-nun	al-ko
1 st .place-ACC	do-ASP-DECL-COMP	said-DECL-COMP	I-TOP	know-COMP
'I know that Jieun _i said to Sanghoon that self _i would be at the top of her class this semester.'				

b. Both TSC and SSC violation:

Heera _i -nun	[tongcahng hoy-ka	[caki-casin _i -i	taumcwu-ey	kyelhonhanta-nun
Heera-TOP	alumni.assoc-NOM	self-NOM	next.week	get.married-RC
ssil]-ul	palphyohayssta]-ko	malhayssta.	[Aera-to	malhay-ss-ta.]
fact-ACC	announced-COMP	said	Aera-too so	say-PAST-DECL
'Heera _i said that the alumni association announced the fact that self _i would get married next week. [Aera said so too.]'				

But their results show that cases like (4a) are in fact also instances of exemption, which means that their study does not contain any control case of local binding. The inanimacy strategy that we instead adopt allows us to avoid this problem by comparing the distribution of the necessarily non-exempt *cachey* to that of *caki-casin*: if *caki-casin* is licensed in any of the conditions in which *cachey* is not available (groups B and C), that demonstrates that *caki-casin* is exempt in those conditions.

Kim and Yoon's (2009) test based on strict readings is moreover problematic for two reasons. First, instead of testing for the availability of strict readings, they use a preferential sentence interpretation task. Second, Hestvik's (1995) observation that strict readings are available for locally bound anaphors in the case of subordination as in (5) is not taken into account, which questions the validity of the diagnostic, all the more since they do not test strict/sloppy readings under local binding.

³ Given that *casin* can serve as an intensifier, *caki-casin* could in principle also be analyzed as the intensified version of *caki*. The two uses of *caki-casin* can however be distinguished by prosodic and interpretive clues. We here focus on the anaphoric use of *caki-casin* and leave the comparison between the two uses for future research.

- (5) John defended himself better than his lawyer did (defend John).

Furthermore, Kim and Yoon (2009) make use of Sells' (1987) logophoric roles (Source, Self, Pivot) to show that *caki-casin* can be long-distance bound under logophoric conditions. But no specific diagnostic is used to justify the categorization, and intervention of other logophoric centers is not controlled for, as can be observed in (4a) and (4b). As will be explained below, we thus designed specific tests to corroborate Kim and Yoon's (2009) findings based on other arguments.

3.2. Our experimental study: Distribution of *caki-casin*

Our experimental study about *caki-casin*, in which 38 Korean speakers participated to judge 69 sentence items, used the same methodology as our study on *cachey*. We adopted the same three main structural distinctions, except that in groups B and C, we added another variable, namely logophoricity.

Thus, group A sentences had clausemate, c-commanding antecedents, just as in the *cachey* study:

- | | | | | | |
|-----|---|---|----------------------|----------------------|----------|
| (6) | Jeehye _i -nun
Jeehye-TOP
'Jeehye _i tried to protect herself _i .' | caki-casin _i -ul
self-ACC | pohohalye
protect | hass-ta.
try-DECL | [5.86/6] |
|-----|---|---|----------------------|----------------------|----------|

The other two groups also involved the same structural conditions as in the previous study: group B sentences contained clausemate, non c-commanding antecedents, and group C included c-commanding non-clausemate antecedents. Because both groups B and C were shown to be cases of Condition A violation in the *cachey* study, we tested for each of them whether the rating of the sentences goes up when the antecedent is a logophoric center, i.e. when the sentence is portrayed in the antecedent's perspective. This would mean that logophoricity licenses exemption from Condition A.

As attested by the literature on logophoricity (Clements 1975, Sells 1987, Kuno 1987, a.o.), there are various ways of defining a logophoric center or perspective holder of a sentence: for instance, it can be the source of the information described by the sentence, or it can be a participant from whose point of view the event is described. To precisely determine which notion is relevant for exemption of *caki-casin*, we followed Charnavel's (2014) methodology, which proposes a specific test for identifying each relevant type of logophoric center (Attitude Holder, Empathy Locus, and Deictic Center). Specifically, we hypothesized that *caki-casin* can be exempt from Condition A when anteceded by attitude holders or empathy loci, and we diagnosed attitude contexts using the Epithet test and empathy contexts designing the new Sibling test. We discuss attitude contexts first.

3.3. Attitude contexts

Our first hypothesis about the exemption of *caki-casin* due to logophoricity is shown in (7):

- (7) Hypothesis 1: *caki-casin* can be exempt from Condition A in attitude contexts when anteceded by the attitude holder of that context.

In other words, we hypothesized that attitude holders are a type of logophoric centers that can exempt *caki-casin* from Condition A when occurring in the relevant attitude context. The notion of attitude holder is independently well-defined in the literature, given that attitude contexts are characterized by specific properties such as the availability of *de dicto*, *de re* and *de se* readings or substitution failures with co-referring terms, among others.

To identify anaphors meeting the conditions described in Hypothesis 1, we used Charnavel's (2014) Epithet test, which is based on Dubinsky and Hamilton's (1998) observation that an epithet cannot be anteceded by an individual from whose perspective its attributive content is evaluated.

- (8) Epithet test for attitude-based exemption (Charnavel 2014): given that an epithet occurring in an attitude context cannot refer to the attitude holder of that context, replace the exempt anaphor with an epithet and check whether the sentence is unacceptable.

In order to experimentally test Hypothesis 1, we introduced attitude contexts in Group C sentences (the condition with c-commanding, non-clausemate antecedents) that contained anaphors passing the epithet test.⁴ Specifically, we constructed sentences that have attitude verbs such as *think* and *say* as matrix verbs, and in which replacing the anaphor with an epithet yields ungrammaticality.⁵ This is illustrated in (9), where *caki-casin* can refer to *Cina*, but not to the epithet *ku papo* ('the idiot').

- (9) Cina_i-nun kkwucwunha-n wuntong-i {caki-casin_i/*[ku papo]_i}-l(1)ul
 Cina-TOP regular-RC exercise-NOM self the idiot -ACC
 pakkwuko issta-ko sayngkakhan-ta.
 change be-COMP think-DECL
 'Cina_i thinks that regular exercise is changing {her_i/*[the idiot]_i}.' [5.47/6]

The results confirmed our hypothesis as shown in Table 2. First, while there was no significant difference ($p=0.416$) between the ratings of *cachey* and that of *caki-casin* in Group A (the local condition), there was a significant contrast ($p<0.0001$) between the ratings of *caki-casin* in Group A and in Group C (the logophoric long-distance condition). Moreover, the logophoric long-distance condition for *caki-casin* had scores significantly higher ($p<0.0001$) than the long-distance condition for *cachey*. In sum, *caki-casin* can be exempt from Condition A in attitude contexts when anteceded by the attitude holder of that context.

Condition	A (clausemateness + c-command)	C (non-clausemateness + c-command)
<i>cachey</i>	4.675	3.25
<i>caki-casin</i>	4.771	[+attitude] 4.726

3.4. Empathy contexts

Furthermore, we hypothesized that a second type of logophoric center can exempt *caki-casin* from Condition A as described in (10):

- (10) Hypothesis 2: *caki-casin* can be exempt from Condition A in non-attitude contexts when anteceded by an empathy locus.

The linguistic relevance of the notion of empathy has been mainly demonstrated by Kuno (1987), who defines an empathy locus as the event participant with whom the speaker empathizes, i.e. identifies: the event expressed by the sentence is described from that participant's point of view. Kuno and Kaburaki (1977) use the Japanese giving verbs *yaru* and *kureru* as an illustration, which describe the event of giving from the perspective of the giver and the receiver, respectively. While Korean also has a parallel pair of giving verbs, the distinction is restricted to the honorific register (Ahn 2016). For that reason, we instead used a novel sibling test introduced in Ahn (2016) to identify empathy contexts.

Korean lexicalizes empathy information in the terms used for older siblings. Specifically, the Korean terms for older siblings identify the gender of the empathy locus, creating a four-way contrast

⁴ Because we wanted to keep the structural conditions as close as possible to the *cachey* study (in which group C only included bi-clausal sentences with complement clauses), all sentences of Group C involved attitude contexts: we found out that complement clauses of verbs with animate subjects are necessarily attitudinal. In particular, even if an adjunct phrase is added to imply that the complement clause does not express the content of the matrix subject's thoughts as in (i), *caki-casin* still passes the epithet test, which shows that it is in an attitude context.

(i) Mincwun_i-un {cakicasin_i-i/*ku papo_i-ka} yenayhanta-nun kes-ul phyoceng-ul thonghay amsihayssta
 MC-TOP self-NOM the idiot-NOM in.relationship-RC fact-ACC facial.expression-ACC through suggested
 'MC_i suggested through his_i facial expression that {he_i/*the idiot_i} was in a relationship.'

⁵ In the experimental study, only sentences with *caki-casin* were tested, sentences with epithets were tested offline.

shown in (11) (vs. two-way contrast in English). Thus, sibling terms can be used as a test to check whether an anaphor is in an empathy context as explained in (12).

(11)	sibling	gender of empathy locus	Korean term
	older brother	male	<i>hyeng</i>
	older brother	female	<i>opa</i>
	older sister	male	<i>nwuna</i>
	older sister	female	<i>enni</i>

- (12) Sibling test for empathy-based exemption (Ahn 2016): given that sibling terms encode the gender of the empathy locus, replace the exempt anaphor with the relevant sibling term (with respect to the gender of the antecedent) and check if it can refer to the antecedent's sibling.

The test is applied in sentences (13a) and (13b) involving unbound *caki-casin*, which is replaced with *nwuna* (older sister, empathy locus male).

- (13) a. Kangwu_i-uy sayngkak-un {caki-casin_i-ul/nwuna-lul} wihem-ey ppattulyessta.
 Kangwu-GEN thoughts-TOP self-ACC sister-ACC danger-DAT make.fall
 'Kangwu_i's thoughts put {himself_i/his_i sister} in danger.' [5.06/6]
- b. *Kangwu_i-uy cacenke-nun {caki-casin_i-ul/nwuna-lul} wihem-ey ppattulyessta.
 Kangwu-GEN bike-TOP self-ACC sister-ACC danger-DAT make.fall
 'Kangwu_i's bike put {himself_i/his_i sister} in danger.' [3.11/6]

In (13a), *nwuna* can refer to Kangwu's older sister and *caki-casin* is acceptable; in (13b) however, *nwuna* cannot refer to Kangwu's sister (it can only refer to the speaker's sister if the speaker is male) and *caki-casin* is not acceptable. This means that Kangwu, the antecedent of *caki-casin*, is an empathy locus in (13a), but not in (13b), so that it can exempt *caki-casin* from Condition A only in (13a). This difference results from the contrast between the two head nouns *sayngkak* 'thoughts' and *cacenke* 'bike': only the former causes the event to be portrayed from the subject's perspective.

Furthermore, applying the epithet test to both sentences as in (14) shows that the anaphor is not in an attitude context: thus, perspective based on empathy has to be distinguished from attitude report.

- (14) Kangwu_i-uy {sayngkak-un/cacenke-nun} [ku papo]_i-lul wihem-ey ppattulyessta.
 Kangwu-GEN thoughts-TOP/bike-TOP the idiot-ACC danger-DAT make.fall
 'Kangwu_i's {thoughts/bike} put [the idiot]_i in danger.'

To test Hypothesis 2, we introduced empathy contexts in Group B sentences⁶ that contained anaphors passing the sibling test (but not the epithet test).⁷ Specifically, we constructed sentences with mental nouns like 'thoughts' that make the antecedent an empathy locus (cf. 13a), and contrasted them with sentences with non-mental nouns like 'bike' (cf. 13b) that do not.⁸

⁶ We tested for the effect of empathy in group B for the same reason as we did not test non-attitude contexts in group C (see footnote 4), i.e. because we wanted to keep the structural conditions as close as possible to the *cachey* study (in which bi-clausal sentences of group C only included complement clauses), and because animate matrix subjects of complement clauses are always attitude holders. But both empathy contexts and non-attitude contexts could in principle be tested in Group C (c-commanding, non-clausemate antecedent) using relative clauses for instance. Conversely, attitude contexts could be tested in group B using sentences such as (ii) where the nature of the head noun (e.g. 'letter', which has a content) can make the VP an attitude context.

(ii) John_i-uy pyenci-nun {caki-casin_i/*ku papo_i}-uy hengtong-ul pangeohass-ta.
 John-GEN letter-TOP self the idiot -GEN behavior-ACC defended
 'John's letter defended {his/*the idiot} behavior.'

⁷ As in the attitude cases (footnote 5), the epithet and sibling tests were performed offline.

⁸ Another way we used to ensure that the subject antecedent is not an empathy locus was to make another element the empathy locus, using verbs such as 'scare' that make the object the empathy locus.

The results confirmed our hypothesis as shown in Table 3. While there is no significant difference ($p=0.152$) between the scores of the Group B sentences containing *cachey* and those of the group B sentences containing *caki-casin* in the non-empathy condition, the *caki-casin* sentences were rated significantly higher ($p<0.0001$) in the empathy condition. In sum, we show that *caki-casin* can be exempt from Condition A in non-attitude contexts when anteceded by an empathy locus.

Table 3

Condition	A (clausemateness + c-command)	B (clausemateness + non c-command)	
<i>cachey</i>	4.675	2.452	
<i>caki-casin</i>	4.771	[- empathy] 2.724	[+ empathy] 3.694

4. Conclusion

Our two studies quantify the significant effect of logophoricity in licensing anaphors in Korean. Empirically, we have added a new anaphor, inanimate *cachey*, to the inventory of Korean anaphors obeying Condition A, and we have showed that *caki-casin* can be exempt from Condition A when logophorically interpreted, thus reinforcing Kim and Yoon's (2009) claim with a different set of methodologies. Theoretically, our data support the Chomskian-type formulation of Condition A as modified in Charnavel and Sportiche (2016), which restricts the binding domain of a plain anaphor to its smallest tensed TP with no subject intervening; we also confirm Charnavel's (2014) claim that logophoricity is a crucial condition for exempting anaphors from Condition A, with attitude holder and empathy locus being two relevant types of logophoric centers. Methodologically, we have strengthened the validity of the inanimacy strategy (Charnavel and Sportiche 2016) and the epithet test (Charnavel 2014), and presented a new test for identifying empathy loci in Korean (Ahn 2016).

References

- Ahn, Dorothy. 2016. Empathy and deixis: A deictic analysis of giving verbs. To appear in Harvard Working Papers in Linguistics, ed. Julia Sturm.
- Charnavel, Isabelle. 2014. Perspectives on Binding and Exemption. Talk given at MIT Ling-lunch. Cf. manuscript available at lingbuzz/002683.
- Charnavel, Isabelle & Dominique Sportiche. 2016. Anaphor Binding – What French Inanimate Anaphors Show. *Linguistic Inquiry* 47(1), 35-87.
- Chomsky, Noam. 1973. Conditions on transformations. A festschrift for Morris Halle, ed. Stephen Anderson and Paul Kiparsky, 232-286. New York: Holt, Rinehart and Winston.
- Chomsky, Noam. 1986. Knowledge of language: Its nature, origin, and use. New York: Praeger.
- Clements, George N. 1975. The logophoric pronoun in Ewe: its role in discourse. *Journal of West African Languages* 10: 141-177.
- Cole, Peter, Gabriella Hermon, & C.-T. James Huang. 2006. Long-distance binding in Asian languages. *The Blackwell Companion to Syntax*: 21-84.
- Culy, Christopher. 1994. Aspects of logophoric marking. *Linguistics* 32: 1055-1094.
- Dubinsky, Stanley & Robert Hamilton. 1998. Epithets as antilogophoric pronouns. *Linguistic Inquiry* 29.4: 685-693.
- Hestvik, Arild. 1995. Reflexives and ellipsis. *Natural Language Semantics*, 3(2), 211-237.
- Huang, C.-T. James & C.-S. Luther Liu. 2001. Logophoricity, Attitudes and ziji at the Interface. Long Distance Reflexives, ed. Peter Cole, Gabriella Hermon, and C.-T. James Huang: 141-195. *Syntax and Semantics* 33.
- Kim, Ji-Hye & James H. Yoon. 2009. Long-distance bound local anaphors in Korean: An empirical study of the Korean anaphor *caki-casin*. *Lingua* 119(5), 733-755.
- Kuno, Susumu. 1987. *Functional Syntax. Anaphora, Discourse and Empathy*. University of Chicago Press.
- Kuno, Susumu, and Etsuko Kaburaki. 1977. Empathy and syntax. *Linguistic Inquiry*: 627-672.
- Pollard, Carl & Ivan A. Sag. 1992. Anaphors and the Scope of Binding Theory. *Linguistic Inquiry* 23, 261–303.
- Reinhart, Tanya, and Eric Reuland. 1993. Reflexivity. *Linguistic Inquiry* 24.4: 657-720.
- Sells, Peter. 1987. Aspects of Logophoricity. *Linguistic Inquiry* 18, 445-479.

Proceedings of the 34th West Coast Conference on Formal Linguistics

edited by Aaron Kaplan, Abby Kaplan,
Miranda K. McCarvel, and Edward J. Rubin

Cascadilla Proceedings Project Somerville, MA 2017

Copyright information

Proceedings of the 34th West Coast Conference on Formal Linguistics
© 2017 Cascadilla Proceedings Project, Somerville, MA. All rights reserved

ISBN 978-1-57473-471-3 library binding

A copyright notice for each paper is located at the bottom of the first page of the paper.
Reprints for course packs can be authorized by Cascadilla Proceedings Project.

Ordering information

Orders for the library binding edition are handled by Cascadilla Press.
To place an order, go to www.lingref.com or contact:

Cascadilla Press, P.O. Box 440355, Somerville, MA 02144, USA
phone: 1-617-776-2370, fax: 1-617-776-2271, sales@cascadilla.com

Web access and citation information

This entire proceedings can also be viewed on the web at www.lingref.com. Each paper has a unique document # which can be added to citations to facilitate access. The document # should not replace the full citation.

This paper can be cited as:

Ahn, Dorothy and Isabelle Charnavel. 2017. Perspective on Korean Anaphors: Comparing Inanimate *cachey* vs. Animate *caki-casin*. In *Proceedings of the 34th West Coast Conference on Formal Linguistics*, ed. Aaron Kaplan et al., 16-23. Somerville, MA: Cascadilla Proceedings Project. www.lingref.com, document #3292.