

Title: Indexicals and the long-distance reflexive *caki* in Korean

Introduction It has been found that indexicals in the complements to attitude verbs can be interpreted with respect to the reported context instead of the actual speech context in many languages, such as Amharic (Schlenker 1999), Zazaki (Anand and Nevins 2004), Uyghur (Sudo 2012), Nez Perce (Deal To appear), etc., a phenomenon known as ‘indexical shift’. The main goal of this paper is, first, to show that Korean is also a language that indexicals can optionally shift under certain attitude predicates, and to propose that there are two different *monsters*, i.e. context-shift operators, for person and adverbial indexicals, given the different properties of the two types of indexicals. This paper also presents novel data on the interactions between the indexicals and the long-distance reflexive/logophor *caki*: context-shift operators cannot intervene between *caki* and an antecedent of *caki*, which I dub the ‘IS (indexical shift)-Blocking Effect.’

Indexicals in Korean I first show that both the 1st/2nd person pronouns and the temporal/locative adverbials, e.g. *yeki* ‘here’, *onul* ‘today’, *ece* ‘yesterday’, etc., are indeed indexicals in Korean, since they cannot co-vary with a quantifier unlike the expressions ‘the speaker’, ‘same day’, etc. (Kaplan 1989). Then, I present evidence that indexicals can shift in an indirect speech. For example, the shifted interpretation in (1) cannot be due to direct quotation, given the fact that the wide scope interpretation of the *in-situ* wh-phrase in the embedded clause is available.

(1) a. Mary-ka **nay**-ka **nwukwu**-lul cohahanta-ko malhayss-ni?

Mary-Nom I-Nom who-Acc like-C said-Q

‘Who did Mary say {I like, Mary likes}?’

b. New York-eyse Mary-ka **nwuka yeki**-eyse thayenassta-ko malhayss-ni?

New York-in Mary-Nom who-Nom here-at be.born-C said-Q

‘In New York, who did Mary say was born {here, in New York}?’

Person vs. Adverbial indexicals Based on this, I provide new data that show contrasts between the person and adverbial indexicals in Korean. First, while the person indexicals can be shifted only under the predicates of communication, e.g. ‘say’, ‘tell’, ‘claim’, etc., the adverbial indexicals are shiftable under other attitude verbs as well, such as ‘think’, ‘believe’, etc. Second, the person and adverbial indexicals do not have to shift together, while each type of indexicals must shift together. Unlike the two person indexicals in (2), the person and adverbial indexicals can shift independently so that there is a four-way ambiguity in (3).

(2) *Context*: John and Mary are having a conversation.

John: Tom-i Sue-eykey [**nay**-ka **ne**-lul cohahanta-ko] malhayssta.

Tom-Nom Sue-to I-Nom you-Acc like-C said

Lit. ‘Tom said to Sue that I like you.’

a. ‘I’ = John, ‘you’ = Mary (Neither Shift) b. ‘I’ = Tom, ‘you’ = Sue (Both Shift)

c. *‘I’ = Tom, ‘you’ = Mary (*Speaker* Shift) d. *‘I’ = John, ‘you’ = Sue (*Addressee* Shift)

(3) *Context*: John and Mary are having a conversation in Seoul.

John: New York-eyse Tom-i [**nay**-ka **yeki**-eyse thayenassta-ko] malhayssta.

New York-at Tom-Nom I-Nom here-at be.born-C said

Lit. ‘Tom said in New York that I was born here.’

a. ‘I’ = John, ‘here’ = Seoul (*Neither* Shift) b. ‘I’ = John, ‘here’ = New York (*Adverbial* Shift)

c. ‘I’ = Tom, ‘here’ = Seoul (*Person* Shift) d. ‘I’ = Tom, ‘here’ = New York (*Both* Shift)

Third, when occurring in the same clause as the long-distance reflexive/logophor *caki*, person indexicals do not receive the shifted interpretation (4), but adverbial indexicals can (5).

(4) *Context*: John and Mary are having a conversation.

John: Tom-i Sue-eykey [**caki**-ka **ne**-lul cohahanta-ko] malhayssta.

Tom-Nom Sue-to caki-Nom you-Acc like-C said
 ‘Tom_i said to Sue that he_i likes {Mary, *Sue}.’

(5) *Context*: John and Mary are having a conversation in Seoul.

John: New York-eyse Tom-i [**caki-ka yeki-eyse** thayenassta-ko] malhayssta.
 New York-at Tom-Nom caki-Nom here-at be.born-C said
 ‘In New York, Tom_i said that he_i was born {in Seoul, in New York}.’

Two Monsters Following Anand & Nevins (2004) and Anand (2006), I assume that indexical shift is the result of a context-shift operator that overwrites the context parameter on the interpretation function. However, given the different properties of the two types of indexicals, especially the fact that they do not have to shift together, I argue that there are two separate operators, OP_{PER} and OP_{ADV} , for person and adverbial indexicals in Korean (Deal To appear). OP_{PER} only overwrites the author and hearer coordinates of the context parameter with those of the index parameter, while OP_{ADV} overwrites the location and time coordinates (6).

(6) **Semantics of the two context-shift operators**

- a. OP_{PER} : $[[OP_{PER} [\alpha]]]^{<Ac, Hc, \dots>, i, g} = [[[\alpha]]]^{<Ai, Hi, \dots>, i, g}$
- b. OP_{ADV} : $[[OP_{ADV} [\alpha]]]^{<\dots, Tc, Lc>, i, g} = [[[\alpha]]]^{<\dots, Ti, Li>, i, g}$

Also, I argue that the non-compatibility between *caki* and the person indexicals only is due to the negative presupposition of *caki* as third person pronouns, i.e. [-1st person, -2nd person] (Schlenker 2003). Given the fact that *caki* cannot have either the 1st or 2nd person pronoun as its antecedent, I assume that *caki* has a third person feature. Then, when both *caki* and ‘you’ in (4) are interpreted relative to the reported context by the shift together constraint, the sentence is infelicitous because *caki* cannot refer to the speaker of that context while ‘you’ refers to the hearer of the same context. This analysis correctly predicts the same pattern for the 3rd person pronoun in the example like (4), and the compatibility between adverbial indexicals and *caki* (5).

Interactions between shifted indexicals and caki I introduce another interesting interaction between shifted indexicals and *caki* in the cases where they occur in a sentence with multiple embedded clauses. That is, *caki* and its antecedent cannot be intervened by the reference of a shifted person or adverbial indexical. In (7a), when the indexical ‘I’ is interpreted relative to the context of the highest clause, the subject in the intermediate clause, ‘Bill’, can be the antecedent of *caki*. In (7b), however, when *caki* finds its antecedent in the highest clause, ‘John’, the indexical must not pick up reference from the intermediate clause, ‘Bill’. To capture this phenomenon, I propose an empirical constraint, namely the ‘IS-Blocking Effect’ (8).

- (7) [John-i [Bill-i [**caki-uy emma-ka na-lul** silhehanta-ko] malhayssta-ko] malhayssta.
 John-Nom Bill-Nom caki-Gen mom-Nom I-Acc hate-C said-C said
 a. ‘John_i said that Bill_j said that his_j mother hates me (=John, *Bill, Speaker).’
 b. ‘John_i said that Bill_j said that his_i mother hates me (=*John, *Bill, Speaker).’

(8) **IS-BLOCKING EFFECT**: *Caki* and its antecedent cannot be intervened by a context-shift operator in an intermediate clause that derives indexical shifting.

* $[_{CP1} NP_1 \dots [_{CP2} NP_2 \dots OP_{PER/ADV} [_{CP3} caki_1 \dots ind_2 \dots]]]$

Unlike *caki* that is always interpreted *de se*, the 3rd person pronoun can be interpreted either *de re* or *de se* in Korean, as in many other languages. When *caki* is replaced by ‘he’ in (7), the 1st person pronoun can be shifted to ‘Bill’, while ‘he’ refers to the matrix subject, ‘John’, unlike *caki* in (7b). Interestingly, ‘his mother’ can only get a *de re* reading but not a *de se* reading in this case. Given this, I also suggest that this effect might be extended to more general cases regarding *de se*.

Selected Reference: Deal, Amy Rose. To appear. Nez Perce embedded indexicals. In H.Greene (ed.). *Proceedings of SULA 7: Semantics of Under-Represented Languages in the Americas*. Amherst: GLSA.