

A Remarks on Shift Together

Shift Together is a generalization about the meanings available for certain attitude complements containing more than one indexical element. In chapter 2, I proposed the following statement of the pattern:

(236) *Shift Together*

If one indexical of class Ψ picks up reference from context c , then all indexicals of class Ψ within the same minimal attitude complement must also pick up reference from context c .

(The following are classes of indexicals: first person, second person, locative, temporal.)

As stated, Shift Together applies only to indexicals that share the same minimal attitude complement. The broader generalization, also as noted in chapter 2, is what I have called Local Determination:

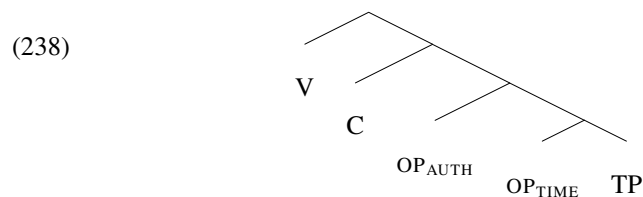
(237) *Local Determination*

An indexical *ind* of class Ψ has its reference determined by the closest shifty operator with scope over *ind* that manipulates contextual coor-

dinate Ψ . If no operator has scope over *ind*, then *ind* has its reference determined by the utterance context.

If two indexicals of class Ψ are members of the same minimal attitude complement, they fall in the scope of all of the same shifty operators (if any are present). Since both must have their reference determined by the closest Ψ -operator, if any, we derive the Shift Together effect. If a single Ψ -operator is present, both Ψ -indexicals will shift; if multiple Ψ -operators are present (with scope over the clause in question), both Ψ -indexicals will shift as determined by the closest operator; otherwise, neither Ψ -indexical will shift.

Reference to particular classes of indexicals is a necessary component of these generalizations. Consider, for instance, an attitude complement containing both a first person indexical and a second person indexical. Whether we expect a limitation on the co-shifting behavior of these elements depends on the size of the complement structure allowed in the case in question. Suppose, for instance, that we are concerned with an attitude verb for which the structure in (238) is possible:



Within the TP, in this structure, first persons (and temporal indexicals) will be shifted, but second persons will not be. This type of option, as discussed in

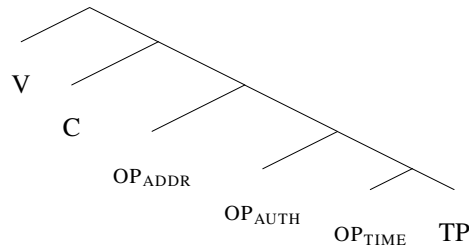
chapter 3, is taken in Slave for complements of the verbs *hadi* ‘say’ and *yenıwε* / *hudeli* ‘want/think’. In (239), first person shifts but second person does not.

(239) Simon [*rásereyineht’u*] *hadi*. *Slave*

Simon [2SG.hit.1SG] 3SG.say
Simon said that you hit him. (Rice 1986, 53)

We also saw that certain Slave verbs, for instance *édedi* ‘tell/ask’, require a larger structure, as in (240). In this structure, first and second person must both shift.

(240)



(241) [*Segha ráwqđí*] *sédıdı* *yılé*. *Slave*

[1SG.for 2SG.will.buy] 2SG.tell.1SG PAST
You told me to buy it for you. (Rice 1986, 51)

Cases like (239) remind us that shift of first person without shift of second person does not run afoul of Local Determination or Shift Together. Conversely, the requirement that first and second persons both shift in cases like (241) follows not from these generalizations but from the subcategorization behavior of the verb *édedi* ‘tell/ask’, together with the hierarchy of shifty operators: this verb allows only complements that contain both OP_{ADDR} and OP_{AUTH} . What would run afoul of Local Determination and Shift Together would be a minimal attitude complement in which, say, one second person indexical but not

another receives a shifted interpretation. Such cases are ruled out by the semantics of shifty operators. Once the addressee coordinate has been shifted, the previous value is overwritten and no longer available to second person indexicals in the scope of the overwriting operator.

It should be noted that patterns like these are also fully captured on the approach to Slave in Anand and Nevins (2004) and Anand (2006). These approaches are exactly like the analyses just shown in that they involve shifty operators that manipulate certain coordinates of context but not others. (This should be no surprise, as Anand and Nevins (2004) and Anand (2006) are direct antecedents of the approach pursued here. For present purposes, the only relevant difference between the present approach and the earlier one is merely that shifty operators are not stacked on Anand and Nevins' and Anand's theories, and therefore there is no functional hierarchy of shifty operators.) These authors furthermore directly claim that Slave obeys Shift Together, based on (242), which involves two first person pronouns (see Anand 2006, 99, Anand and Nevins 2004, (18)):

(242) [Sehlégé segha goníhkie rárule] yudeli.

[1SG.friend 1SG.for slippers 3SG.will.sew] 3SG.want.4SG

- a. She_i wants her_i friend to sew slippers for her_i.
- b. She_i wants my friend to sew slippers for me.
- c. ✗ She_i wants my friend to sew slippers for her_i.
- d. ✗ She_i wants her_i friend to sew slippers for me.

(Rice 1986, 56)

Unfortunately, the explicit statements of the Shift Together constraint provided by these authors do not obviously match this analysis. I reprint the relevant formulations here:

- (243) Shift Together constraint (Anand and Nevins 2004, (16))

All indexicals within a speech-context domain must pick up reference from the same context.

- (244) Shift Together constraint (Anand 2006, 100)

All shiftable indexicals within a[n] attitude-context domain must pick up reference from the same context.

There is a natural interpretation available for both formulations which is falsified by (239). (This holds on the assumption that second person is a “shiftable indexical,” in Anand’s (2006) formulation; his theory does not provide for a characterization of this term.) One possibility—perhaps the most plausible one—is that Anand and Nevins see the embedded clause in (239) as interpreted with respect to a single context, which is partially shifted; both embedded indexicals draw their reference from this context and thus one shifts and the other does not. Another possibility is that the formulations of the constraint are to be understood as involving a contextual restriction to all indexicals *of the same class*, rather than all indexicals *tout court*.

Whatever the reason, the absence of explicit reference to indexical classes in the formulations reprinted in (243) and (244) has engendered significant confusion in the literature. Reports of “violations of Shift Together” involving

separate classes of indexicals are made by Quer (2005), Korotkova (2016), and Hübl et al. (2019), among others. The data discussed by these authors show, as Slave (239) also does, that some classes of indexicals may shift without other classes of indexicals necessarily following suit. This shows that the cases in question do not feature a *total* series of shifty operators, shifting all coordinates of context; it does not in itself pose any empirical problem for the shifty operator theory.

Some of the insights that have come from an exploration of these cases have the potential to shed light on additional examples that have been recently put forward as putative Shift Together violations. Korotkova (2016), for instance, discusses the role of indexical elements in providing perspectival arguments for evidential expressions. In matrix clauses, evidentials reflect the evidence of the speaker, as in the following example from Bulgarian:

(245) Context: The speaker sees pieces of a vase but did not see it break.

Sčupi-l-a se. *Bulgarian*

break-IND.PAST-F REFL

It broke, I infer. (Korotkova 2016, 214)

However, in various languages that permit embedded evidentials, the evidence holder—what Korotkova dubs the “origo”—may be not the speaker, but rather a participant in the embedding attitude event. Korotkova reports that this is an

option for some Bulgarian speakers.¹²⁶ The interpretation of (246) exemplifies a shifted origo for the embedded evidential.

- (246) Nataša popita Stefan [dali mechkae mina-l-a
 Natasha ask.AOR.3SG Stefan [whether bear be.3SG.PRES pass-IND.PAST-SG.F
 ottuk].
 from.here]
 Natasha asked Stefan whether, given what he hears/infers, a bear passed
 here. (Korotkova 2016, 288)

Notably, Korotkova finds, Bulgarian attitude reports that embed multiple evidentials obey Shift Together: it is not possible to shift the origo for one evidential but not the other. Rather, a consistent choice of origo must be used throughout the embedded clause.

- (247) Context: I'm exchanging news with Maria; we're discussing our cohort. I was mostly in touch with Jane and tell Maria that she lives in Japan. She was in touch with Lisa who is in Canada. Later on, Maria's mom joins us. Maria tells her: "Jane lives in Japan and Lisa lives in Canada."

¹²⁶Note that this is contrary to earlier findings by Sauerland and Schenner (2007).

Maria kaza na majka si che [Dzhein zhivee-l-a v Yaponia]

Maria said to mother her that [Jane live-IND.PAST-F in Japan]

i [Lisa zhivee-l-a v Kanada].

and [Lisa live-IND.PAST-F in Canada]

Impossible reading: Maria told her mother that, *as she was told*, Jane lives in Japan and—*as I was told*—Lisa lives in Canada. (Korotkova 2016, 255)

Korotkova concludes that the behavior of embedded evidentials is well-suited for an indexical analysis; the origo is a contextual coordinate and may be shifted, yielding non-speaker-oriented evidential meanings. She notes, however, that there is no requirement that the evidential origo shift together with first person pronouns. In Korean, shift of the evidential origo is obligatory, but shift of first person pronouns is optional:

(248) Yenghi-nun [John-i na-lul po-te-la-ko]

Yenghi-TOP [John-NOM 1 SG-ACC see-DIR-DECL-COMP]

malha-yess-ta.

Korean

say-PAST-DECL

a. Yenghi said that, as she perceived, John saw me.

b. Yenghi_i said that, as she perceived, John saw her_i.

(Korotkova 2016, 258)

This fact reveals that the notion of an origo is not reducible to the notion of an author—and thus the working characterization of contexts we have made use

of up to this point is incomplete. A context must separately specify an author and an origo. This is much like the way in which a context must separately specify an author and an addressee for the proper interpretation of examples like Slave (239). Accordingly, an operator that shifts origo without shifting author is readily definable:

$$(249) \quad \llbracket \text{OP}_{\text{ORIGO}} \rrbracket^{c,i,g} = \lambda p \in D_{\langle \kappa, \kappa \rangle} . p(i)(c^{origo(i)/origo})$$

Of course, for unshifted contexts c , $origo(c)$ and $author(c)$ have the same value (which presumably reflects the fact, grounded in the pragmatics of assertion, that the evidence holder for a matrix utterance is the speaker herself). It is only by careful consideration of embedded contexts that Korotkova untangles these notions and thus makes a case for the inclusion of an origo coordinate in contextual tuples.

This case study potentially casts light on an additional phenomenon in Korean, which has been reported as an exception to Shift Together by Sundaresan (2018). In Korean, the verb meaning ‘give’ is subject to suppletive allomorphy. In matrix clauses, the allomorph *tal* is used where the speaker is the goal and the clause is imperative, as in (250a). When one or both conditions is not met, as in (250b) and (250c), the allomorph *cwu* is used, and *tal* is not possible.¹²⁷

¹²⁷Sundaresan (2018) also reports a third condition for the use of *tal*, which I set aside here for the sake of simplicity: the goal must be “construed as an eventual recipient of the theme,” meaning that *tal* is not possible in the negated version of (250a).

(250) a. (Ne) na-ekey satang-ul tal-la!

2SG.NOM 1SG-DAT candy-ACC give-IMP
Give me a candy!

b. Chingwu-ka na-ekey satang-ul cwu/*tal-ess-ta.

friend-NOM 1SG-DAT candy-ACC give-PAST-DECL
The friend gave me a candy.

c. Ne casin-eykey senmwul-ul cwu/*tal-la!

2SG ANAPH-DAT gift-ACC give-IMP
Give yourself a gift!

(Sundaresan 2018, 21)

Korean freely allows embedded imperatives (Pak et al. 2008).¹²⁸ In embedded imperatives, *tal* may be used where the goal is an attitude holder, as shown in (251). (I use quotation here in the translation line only to clarify the intended meaning. Note that Sundaresan does not discuss the form of ‘give’ when the goal of an embedded imperative remains the overall speaker.)

¹²⁸Pak et al. (2008) explicitly propose that some Korean indexicals are shiftable whereas others are not; in particular, they propose that the only shiftable person features in Korean are those associated with embedded imperatives. This is contrary to the findings of Park (2016), who shows that ordinary person indexicals are shiftable in Korean. Pak et al.’s proposal might be taken to suggest that Korean embedded imperatives give rise to violations of Shift Together, but they provide no examples that demonstrate potential violations.

- (251) Swuci-ka Yuswu-eykey [Cimin₁-ika Cengmi-eykey [casin₁-eykey
 Swuci-NOM Yuswu-DAT [Cimin-NOM Cengmi-DAT [self-DAT
 senmwul-ul tal-la-ko] hay-ss-ta-ko] mal-hay-ss-ta.
 gift-ACC give-IMP-C] v-PAST-DECL-C] say-PAST-DECL
 Swuci told Yuswu that Cimin told Cengmi, “Give me a gift.”

Such data are potentially analyzable in multiple ways. One analysis, given Korotkova’s analysis reviewed just above, might invoke origo shift. On this analysis, *tal* would be used in imperatives when the origo (not necessarily the author) is the goal of ‘give’. Korotkova argues that origo shift is obligatory in Korean. On this approach, one would expect the form *tal* to be impossible in embedded imperatives with the speaker as a goal, for instance, ‘Yuswu told Cimin to give me a gift’. Another analysis would not invoke indexical shift at all and would treat the distribution of *tal* as involving an indexiphor (in the sense of chapter 5) sensitive to either *author(i)* or *origo(i)* values. On this approach, locality effects are predicted: e.g. (251) should lack a reading paraphrasable as ‘Swuci told Yuswu that Cimin told Cengmi to give Swuci a gift’.

Sundaesan (2018) proposes a third option, which is that author shift is involved: *tal* requires a first person goal, and the goal of the most embedded clause in (251) is a shifted first person indexical. Based on this analysis, she reports that the example in (252) is a violation of Shift Together, as *tal* indi-

cates first person indexical shift but the indexical pronoun *nalul* ‘me’ is not shifted.¹²⁹

(252) Context: My sister Cengmi, who is very fond of me, has a birthday coming up but doesn’t know what to do to celebrate. Cimin, a mutual friend of ours, suggests to Cengmi that she have me visit her for her birthday, as a gift to herself on that day.

Cimin-ika Cengmi-eykey [casin-eykey na-lul tal-la-ko] mal-hay-ss-ta.

Cimin-NOM Cengmi-DAT [self-DAT 1SG-ACC give-IMP-C] say-PAST-DECL

Cimin_i told Cengmi_j to give me to herself_i.

Use of this case as evidence against the shifty operator theory depends on ruling out the two alternative analyses just sketched, neither of which finds a Shift Together violation in this example. On a origo-indexical analysis, for instance, (252) is parallel to (248a), where an evidential is shifted but a personal pronoun

¹²⁹A question facing this account involves the morphology of the embedded goal argument, namely its realization with the pronoun *casin*. Park (2016) shows that the Korean logophor *caki* cannot be co-referential with a shifted first person indexical. She attributes this fact to third person features on *caki*. If the same effect holds for *casin*, used in (251) and (252), this challenges an account in terms of first person indexical shift: *casin* would need to bear first person features, contrary to its behavior in other cases.

is not. On an indexiphoric analysis, this case is parallel to Amharic data like (253); here one argument refers to *auth*(*i*) whereas the other refers to *auth*(*c*).

(253) John [*pro*_{subj} *pro*_{obj} al-ittazzəzə-ññ] alə.

John [XPHOR 1 SG NEG.1 S-obey.MKIMPERF-1 SO] say.PERF.3 SM
Amharic

John_i says he_i will not obey me. (Leslau 1995)

A general conclusion to be drawn here is that diagnosing a violation of Shift Together requires evidence of two sorts. First (as emphasized in chapter 5), it must be shown that the elements in question are indeed indexical. If they are instead indexiphoric, or subject to binding or other means of interpretation, no Shift Together effect is expected. Second, it must be shown that indexical elements make reference to the same coordinate of context. If they draw on separate coordinates of context, as for instance first and second person indexicals do, no Shift Together effect is expected. Rather, what is expected in this case is a hierarchical effect, given the hierarchy of shifty operators proposed in this book: one class of indexicals should be able to shift without the other shifting, though not vice versa. (For a caveat, see the discussion of lexical bundling in chapter 4.)

Both points are relevant for one final case I will mention here, related to Slovenian embedded imperatives. Stegovec and Kaufmann (2015) report that these clauses involve a violation of Shift Together: first and second person indexicals do not shift, but the “director” of the imperative—the individual who publicly commits to the preference that the imperative relates—does shift.

In a matrix imperative, the director is the speaker. In the embedded imperative in (254), the director is Pero.

(254) Pero je rekel, da me ti poberi. *Slovenian*

Pero is said.M that 1SG.ACC you pick.up.IMP
 Pero said that you should pick me up. (Stegovec 2019, 53)

One possible analysis of such data, like for the Korean data discussed above, involves a shifty indexical analysis involving a coordinate of context other than author or addressee. (This could in principle be a *sui generis* director coordinate—in which case we expect Shift Together effects among directors of imperatives in cases where multiple imperatives are embedded under a single verb, but no Shift Together effect with evidentials or pronouns. It could be an origo coordinate, as in Korotkova (2016). It could be a judge coordinate, as in McCready (2007) and Deal and O'Connor (2011).) In this case, we expect Shift Together effects in cases where the relevant coordinate of context is multiply invoked. But this is not the case in (254), which is therefore not a violation of Shift Together. Another style of analysis, pursued by Stegovec (2019), approaches such data as involving not indexicality but binding. Stegovec posits a PRO argument that saturates an argument position reserved for directors. PRO is itself then bound by attitude predicates or by illocutionary operators, yielding the attested pattern for matrix and embedded imperatives. This analysis posits no context shift of any type.