

## Different routes to reflexivity: Voice vs. Perspective

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*Goals:* (i) to show that reflexivity (co-argument anaphora) may be voice- or perspective-driven (ii) to motivate and investigate perspective-driven reflexivity via Tamil. In many languages, unaccusatives and reflexives (and sometimes, passives and middles) tend to be identically-marked suggesting that reflexivity is a voice phenomenon (Grimshaw, 1982; Reinhart and Siloni, 2004; Alexiadou and Anagnostopoulou, 2004). Dravidian *kol*, obligatorily marks co-argument reflexivity, but also marks unaccusatives, suggesting that it also chooses the voice route (Tamil (1)-(2)). Indeed, Lidz (2001, et seq.) proposes, building on Embick (2004), that *kol* in the Dravidian language Kannada spells out a specifierless *v* head in reflexives and unaccusatives alike:

- (1) பாணை ஓடெ-ஞ்சுக்-கொண்-டது.  
Paanæ oḍæ-nṣūk-ko-ṇḍ-adū.  
pot.nom break-intr.asp-*kol*-pst-3nsg  
``The pot broke-*kol*."
- (2) ராமன் தன்-னை கண்ணாடி-லைப் பார்-த்துக்-கொண்-டான்/\*பார்-த்-தான்.  
Raman<sub>i</sub> tann-æ<sub>{i,\*j}</sub> kaṇṇaadi-læ paar-ttū-kko-ṇḍ-aan/\*paar-tt-aan.  
Raman.nom anaph-acc mirror-loc see-asp-*kol*-pst-3msg/see-pst-3msg-comp  
``Raman<sub>i</sub> saw himself<sub>{i,\*j}</sub> in the mirror."

However, closer inspection shows that the distribution of *kol* at least in Tamil is completely independent of predicate valency. I. *kol*-suffixation on unaccusatives is optional ((3) vs. (1)):

- (3) பாணை ஓடெ-ஞ்சது/\*ஓடெ-ச்-சது.  
Paanæ oḍæ-nṣ-adū/\*oḍæ-čč-aḍū.  
door.nom break-intr.pst-3nsg/\*break-tr.pst-3nsg  
``The pot broke."

II. *kol* optionally also marks non-reflexive transitives (and unergatives):

- (4) ராமன் கிருஷ்ண-னைப் பார்-த்துக்-கொண்-டான்/பார்-த்-தான்.  
Raman Krishnan-æ paar-ttū-kko-ṇḍ-aan/paar-tt-aan.  
Raman[nom] Krishnan-acc see-asp-*kol*-pst-3msg/see-pst-3msg  
``Raman saw Krishnan."

*kol*-suffixation: see the contrast in (3). Thus, *kol* is not a voice marker: reflexivity in Dravidian must be driven by something other than voice.

In order to understand what this is, we need to carefully tease apart the contribution of *kol* (a morpheme that the Dravidianist literature treats as notoriously tricky to describe). Our first hint comes from the linear sequence in ((1)-(4)) where *kol* occurs between the transitivity and tense morphemes. Structurally, it must thus realize a head above Kratzerian Voice but below T (Mirror Principle), suggesting that *kol* might be sensitive to both aspectual and thematic restrictions. An investigation of *kol*-distribution across the Levin (1993) verb-classes based on a survey of 40 native Tamil-speaking informants comparing minimal pairs with/without *kol* in different discourse scenarios, confirms this. Aspectual restrictions: Verbs that aren't compatible with a result state, either because they lack an eventive component (e.g. inherent statives), or because they actively resist the addition of one (e.g. involuntary emissives), are incompatible with *kol*. However, telic change-of-state/location predicates (inchoatives) frequently co-occur with *kol*. All other verbs which lack a result state but are compatible with one (e.g. most activity verbs) can optionally take *kol* when such a result state is added. Thematic restrictions: *kol* is incompatible with predicates that have an intrinsic mental/spatial viewpoint (psych- and path-verbs), and with verbs

that are incompatible with mental/spatial viewpoint holding toward their result state by one of their arguments (e.g. involuntary directed motion verbs). Conversely, verbs that are especially conducive to such viewpoint-holding (postural/grooming verbs) frequently co-occur with *ko*]. Based on these results, I argue that *ko*] attaches to the result state of a main event predication. The highest argument of the main event predication (Agent in transitives/unergatives and Theme in unaccusatives) *comes to hold/gets* this result state in its mental/spatial locus, such that this result state *becomes* evaluated from the mental/physical space of this argument. Thus, *ko*] introduces a semantics much like those of Sells (1987)'s self (``one whose mind is being reported") and pivot (``if someone makes a report with Mary as the pivot, that person is understood as literally standing in Mary's shoes") roles -- as illustrated by (5):

- (5) மான்சி பா-லை ஊத்-திக்-கொண்-டாள்.  
 Mansi paal-æ uutt-i-kko-ṅḍ-aa].  
 Mansi milk-acc pour.tr-asp-*ko*]-pst-3fsg  
 ``Mansi poured-*ko*] the milk."

The (optional) addition of *ko*] to the verb *uutt-* (``pour') in (5) adds the information that the result state of milk-pouring comes to be evaluated from Mansi's physical or mental space. Informally, we get the reading that Mansi either poured the milk *for* herself (mental space), or that she poured it *on* herself (physical space). Formally, *ko*] has the lexical-entry in (6):

- (6)  $[[ko]]^{c.g} = \lambda Q_{\langle s,s,t \rangle} \lambda x \lambda e' \exists s. Q(s) \wedge Get(e') \wedge Locus(e', x) \wedge Theme(e', s)$

Note that the mental vs. physical nature of the *Locus* predicate is underspecified: this is discourse-contextually supplied, yielding the ambiguity in (5). The *Locus* predicate can be interpreted as a type of  $\theta$ -role. Given the locality of thematic relations, we might construe *ko*] as a (thematic-)raising predicate (along the lines of Ramchand, 2008, and adopting her loosening of the  $\theta$ -criterion) which raises the highest argument of the main event to its Spec and assigns it this  $\theta$ -role. This brings us back full circle to reflexives. Long-distance anaphora in Tamil (as in Italian, Icelandic etc) is observed (Bianchi, 2003; Sundaesan, 2012) to be perspective-driven: i.e. the antecedent must denote a sentient individual that holds a mental/spatio-temporal perspective toward some minimal predication containing the anaphor. However, while reflexivity in Tamil requires the addition of *ko*], long-distance anaphora doesn't:

- (7) மாயா ஸ்ரீ தன்-னை அடி-த்-தான்-னு நெனெ-த்-தாள்.  
 Maya<sub>i</sub> [<sub>CP</sub> Sri<sub>j</sub> tann-æ<sub>{i,\*j}</sub> adī-tt-aan-nnu] nene-tt-aa].  
 Maya Sri anaphhit-pst-3msg think-pst-3fsg  
 ``Maya<sub>i</sub> thought [<sub>CP</sub> that Sri<sub>j</sub> hit her<sub>i</sub>/\*himself<sub>i</sub>]."

and (2) is that the antecedent starts out as a co-argument of the anaphor in the latter but not in the former. I propose therefore that perspective-holding cannot occur under co-argumenthood: i.e. the individual denoted by a DP may not hold a perspective toward a predication in which it is properly contained (dominated). This makes sense of the connection between *ko*]'s independently supported status as a raising predicate and its obligatory presence in reflexives. I.e. the addition of *ko*] in (2) allows the agentive DP to ``escape" the VoiceP containing both itself and the anaphor, to [Spec, *ko*]P] where it scopes over the VoiceP and has the right perspectival syntax/semantics required to antecede the anaphor.

Crosslinguistic consequences: 1. This shows that perspective may regulate not just long-distance (as typically assumed), but also co-argument anaphora: and more generally, that it plays a role in regulating thematic dependencies. 2. It provides insight into some of the quirks of anaphora in psych predicates. Although *ko*] is obligatorily absent in psych-predicates (as mentioned), reflexive binding is nevertheless possible:

- (8) ஸ்ரீ தன்-னை வெறு-த்-தான்./\*த்துக்-கொ-ண்-டான்.  
 Sri<sub>i</sub> tann-æ<sub>{i,\*j}</sub> veru-tt-aan/\*veruttü-ko-ṇḍi-aan.  
 Sri anaph-acc hate-pst-3msg/\*hate-ko<sub>i</sub>-pst-3msg  
 ``Sri<sub>i</sub> hated himself<sub>{i,\*j}</sub>."''

This suggests that psych predicates already have a (mental)-perspective built into their meaning -- an intuitively appealing notion. Furthermore, if strict co-argumenthood indeed blocks perspective-holding, this means that the experiencer antecedent in (8) must be somehow also raised (or just merged higher) yielding a more complex event-structure similar to the *ko<sub>i</sub>*-structure in (2). This in turn might help explain the unique possibility of "backward binding" in psych-predications in many languages. The same argumentation may be used to explain cases of perspectival anaphora across spatial PPs which, interestingly, have been independently argued to be more structurally complex (Svenonius, 2008) than other PPs. 3. The representation of perspective has been argued for in CPs (Sells, 1987; Koopman and Sportiche, 1989; Speas, 2004), PPs (Svenonius, 2008; Rooryck and vanden Wyngaerd, 2011), and APs (in "taste" predicates Stephenson, 2010). The evidence for perspectival interaction in the event/*v* domain discussed here thus extends the range of predications in which perspective may play a role, suggesting indeed that all predications may involve the representation of perspective at some level, with languages parametrically choosing the range of phenomena they are linguistically relevant for.

## References

- Alexiadou, Artemis, and Elena Anagnostopoulou. 2004. Voice morphology in the causative-inchoative alternation: evidence for a non-unified structural analysis of unaccusatives. In *The unaccusativity puzzle*, ed. Artemis Alexiadou, Elena Anagnostopoulou, and Martin Everaert, OSTL, 114--136. Oxford: Oxford University Press.
- Bianchi, Valentina. 2003. On finiteness as logophoric anchoring. In *Temps et point de vue/Tense and Point of View*, ed. Jacqueline Guéron and L. Tasmovski, 213--246. Nanterre: Université Paris X.
- Embick, David. 2004. Unaccusative syntax and verbal alternations. In *The unaccusativity puzzle: Explorations of the syntax-lexicon interface*, ed. Alexiadou et al, 137--158. Oxford: OUP.
- Grimshaw, Jane. 1982. On the lexical representation of Romance reflexive clitics. In *The mental representation of grammatical relations*, ed. Joan Bresnan, 87--148. Cambridge, MA: MIT Press.
- Koopman, Hilda, and Dominique Sportiche. 1989. Pronouns, logical variables, and logophoricity in Abe. *Linguistic Inquiry* 20:555--588.
- Levin, Beth. 1993. *English verb classes and alternations: a preliminary investigation*. Chicago: University of Chicago Press.
- Lidz, Jeffrey. 2001. The argument structure of verbal reflexives. *Natural Language and Linguistic Theory* 19.
- Ramchand, Gillian. 2008. *Verb meaning and the lexicon: a first phase syntax*. Cambridge: CUP.
- Reinhart, Tanya, and Tal Siloni. 2004. Against an unaccusative analysis of reflexives. In *The unaccusativity puzzle*, ed. Artemis Alexiadou, Elena Anagnostopoulou, and Martin Everaert, OSTL, chapter Oxford, 159--180. Oxford University Press.
- Rooryck, Johan, and Guido vanden Wyngaerd. 2011. *Dissolving binding theory*. Oxford Studies in Theoretical Linguistics. Oxford: Oxford University Press.
- Sells, Peter. 1987. Aspects of logophoricity. *Linguistic Inquiry* 18:445--479.
- Speas, Margaret. 2004. Evidentiality, logophoricity and the syntactic representation of pragmatic features. *Lingua* 114:255--276.
- Stephenson, Tamina. 2010. Control in centred worlds. *Journal of semantics*.
- Sundaresan, Sandhya. 2012. Context and (co)reference in the syntax and its interfaces. Doctoral Dissertation, University of Tromsø and University of Stuttgart, Tromsø.
- Svenonius, Peter. 2008. Spatial P in English. *Lingbuzz*.