

Perspectival reflexivity (or what makes reflexives special):  
a case study from Tamil\*

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## 1 Overview

The goal of this paper is to analyze the nature of the perspectival dependency between an anaphor and its antecedent when the two are arguments of the same predicate (i.e. are co-arguments) — using the Dravidian language, Tamil, as a case-study. I will henceforth reserve the term “reflexivity” for this type of relation. Like cases of reflexivity in many languages (see Reinhart & Reuland, 1993; Jayaseelan, 1997; Reuland, 2001b, 2011, for an overview), this dependency is distinguished from other cases of anaphora in the language by being specially marked. This in turn suggests that reflexivity is special and requires recourse to additional grammatical devices beyond what is needed by other types of anaphora where the antecedent and anaphor are not co-arguments.

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Reflexive structures in many dialects of Tamil, and in other Dravidian languages like Kannada (see, for instance, work by Lidz, 2001, 2004, et seq.) are obligatorily marked by a morpheme “*ko*” which is suffixed onto the predicate which the anaphor and its antecedent are arguments of. The sentence in (1) shows a non-reflexive sentence which is licit in the absence of *ko*. The minimal pair in (2)-(3) shows reflexive variants of this sentence without and with *ko*, respectively, and illustrates that *ko* cannot be licitly omitted in a standard reflexive construction:

- (1) Kalpana Siva-væ ki[-in-aa].  
 Kalpana.NOM Siva-ACC pinch-PST-3FSG  
 “Kalpana pinched Siva.”
- (2) \* Kalpana<sub>i</sub> tann-æ<sub>i</sub> ki[-in-aa].  
 Kalpana.NOM ANAPH-ACC.SG pinch-PST-3FSG  
 “Kalpana<sub>i</sub> pinched herself<sub>i</sub>.” (Intended)
- (3) Kalpana<sub>i</sub> tann-æ<sub>{i,\*j}</sub> ki[-i-ko-ŋd-aa].  
 Kalpana.NOM ANAPH-ACC.SG pinch-ASP-*ko*-PST-3FSG  
 “Kalpana<sub>i</sub> pinched herself<sub>{i,\*j}</sub>.”

Non-reflexive anaphora in Tamil — i.e. structures where the anaphor and its antecedent are not co-arguments as in cases of long-distance anaphora and logophora — successfully obtains even in the absence of *ko*, however. In (4), (2) is embedded under an attitude verb; unlike (2), however, the resulting complex sentence in (4) is perfectly grammatical. Reflexive anaphora is still ruled out: i.e. *Kalpana* still cannot antecede the anaphor *ta(a)n*; but the matrix subject *Siva* denoting the attitude-holder may licitly “long-distance” antecede the anaphor, despite the absence of *ko*:

- (4) Siva<sub>i</sub> [<sub>CP</sub> Kalpana<sub>j</sub> tann-æ<sub>{i,\*j}</sub> ki[-in-aa]-ŋnnũ] nene-tt-aan.  
 Siva Kalpana ANAPH-ACC.SG pinch-PST-3FSG-COMP think-PST-3MSG  
 “Siva<sub>i</sub> thought that Kalpana<sub>j</sub> pinched him<sub>{i,\*j}</sub>.”

That said, nothing prevents *ko* from being present in such structures. Thus, we could come up with a minimal variant to (4) — as in (5) below — which differs from (4) only in that there is a *ko*-morpheme marking the embedded verb:

- (5)  $Siva_i$  [<sub>CP</sub>  $Kalpana_i$   $tann-\text{æ}_{\{i,j\}}$   $ki\ll i\text{-ko-}\eta\text{d}\text{-aa}\text{-}\check{u}nn\check{u}$ ]  $nene\text{-}tt\text{-}aan$ .  
 Siva Kalpana ANAPH-ACC.SG pinch-PST-3FSG-COMP think-PST-3MSG  
 “ $Siva_i$  thought that  $Kalpana_j$  pinched  $him_i/herself_j$ .”

This sentence is also grammatical, with the only difference lying in the range of possible antecedents for the anaphor *ta(a)n*. Where in (4) the matrix attitude-holder *Siva* is the only possible antecedent, in (5), both *Siva* and the co-argument *Kalpana* are possible antecedents for the anaphor. Given our prior observation that *ko* makes reflexive antecedence possible, this indeed is exactly what we expect. Taken by themselves, the minimal pairs presented in (2)-(3) and (4)-(5) suggest that anaphoric dependencies show a clear demarcation with respect to their distribution with *ko*: co-argument anaphora (or reflexive dependencies) requires the concomitant presence of *ko*, but all other types of anaphoric dependency do not.

However, reflexive structures involving psych predications such as those in (6) and (7) complicate this simple, binary picture. Consider the minimal pairs below:

(6) PSYCH REFLEXIVE WITH DATIVE SUBJECT:

- a.  $Kalpana\text{-}v\check{u}kk\check{u}_i$   $tann-\text{æ}_{\{i,*j\}}$   $pidikk\text{-}æ\text{-}l\text{-}æ$ .  
 Kalpana-DAT ANAPH-ACC.SG like-NEG  
 “ $Kalpana_i$  didn’t like herself <sub>$\{i,*j\}$</sub> .”
- b. \*  $Kalpana\text{-}v\check{u}kk\check{u}_i$   $tann-\text{æ}_i$   $pidi\text{-}tt\check{u}\text{-}kko\ll \text{-}æ\text{-}l\text{-}æ$ .  
 Kalpana-DAT ANAPH-ACC.SG like-ASP-*ko*-NEG  
 “ $Kalpana_i$  didn’t like herself <sub>$i$</sub> .” (Intended)

(7) PSYCH REFLEXIVE WITH NOMINATIVE SUBJECT:

- a.  $Abinaya_i$   $tann-\text{æ}_{\{i,*j\}}$   $vir\check{u}mb\check{u}\text{-}gir\text{-}aa\ll$ .  
 Abinaya.NOM ANAPH-ACC.SG love-PRS-3FSG  
 “ $Abinaya_i$  loves herself <sub>$\{i,*j\}$</sub> .”
- b. \*  $Abinaya$   $tann-\text{æ}_i$   $virumb\text{-}i\text{-}ko\ll \check{u}\text{-}gir\text{-}aa\ll$ .  
 Abinaya.NOM ANAPH-ACC.SG love-ASP-*ko*-PRS-3FSG  
 “ $Abinaya_i$  loves herself <sub>$i$</sub> .” (Intended)

The minimal pairs in (6) and (7) involve reflexive structures with “quirky” dative and

nominative subjects, respectively. These show precisely the opposite behavior with *ko* from that exhibited by non-psych reflexives like those in (2)-(3): i.e. reflexive anaphora obtains in the obligatory *absence* of *ko*. It can, furthermore, be shown that the ban on *ko* stems not from restrictions imposed by the reflexive dependency, but from properties of the psych predicates. This can be gleaned from the fact that *ko* is disallowed in the non-reflexive counterparts of the psych predications in (6)-(7), as well, as shown below:

- (8) Kalpana-vükkü Siva-væ piḍikkæ-læ/\*piḍittü-kko||æ-læ.  
 Kalpana-DAT Siva-ACC like-NEG/\*like-ASP-*ko*-NEG  
 “Kalpana didn’t like Siva.”
- (9) Abinaya Dhanush-æ virūmbü-gir-aa|/\*virūmb-i-kko|-gir-aa|.   
 Abinaya.NOM Dhanush-ACC love-PRS-3FSG/love-ASP-*ko*-PRS-3FSG  
 “Abinaya loves Dhanush.”

We thus have potentially three classes of anaphora in Tamil: Structures involving standard reflexives (i.e. reflexives under non-psych predicates) which require the presence of *ko*, those involving non-reflexive anaphora (i.e. long-distance anaphora and logophora) which obtain in the absence of *ko* (though its presence is not banned), and those involving reflexives under psych predicates which require the absence of *ko* (though, again, this ban on *ko* seems to be independent of reflexivity and driven by an incompatibility with psych predicates more generally).

The central question that this paper asks is why reflexivity alone (as opposed to other types of anaphora in this language) requires special marking in the form of *ko*, and how this relates to the nature and grammatical representation of perspective. A corollary point of investigation has to do with understanding what makes perspectival reflexivity crosslinguistically special. The line of argumentation that I will pursue here consists of the following analytic pieces. The basic idea that I will motivate is that grammatical perspective is structurally instantiated. In languages with perspectival anaphora, the anaphor must be syntactically bound within its local Perspectival Phrase or PerspP (a binding domain with the additional restriction that the binder has to denote a

perspective-holder). The antecedent, on the other hand, must be outside the perspectival domain. Reflexives, I will then propose, fundamentally differ from other types of anaphora in the following way: they instantiate the only structure where the intended antecedent is also a co-argument of the anaphor. This has the consequence that, in reflexives, the antecedent is also contained inside the local PerspP of the anaphor, which yields an anti-locality effect. Many languages, I believe, simply avoid such a configuration altogether — which may in turn help explain why perspectival reflexives are typologically so uncommon. Other languages, like Tamil, have recourse to special means for modifying the offending configuration (thereby allowing perspectival reflexivity to obtain after all). This, I propose, is precisely what the addition of *ko* helps to do.

First, I will show that reflexivity in Tamil (both with *ko* and in the context of psych predicates) is perspectivally regulated, like other types of anaphora in this language. For the standard *ko* reflexives, given the model of anaphora motivated here, this means that *ko* selects a PerspP in its complement. Second, I will argue that *ko* spells out a head with an affectedness semantics above a resultative aspectual head (*Asp<sub>res</sub>*) which itself is merged above Kratzer (1996)'s Voice. Third, *ko* thematically raises (in the sense of Ramchand, 2008) the external argument in the Spec of Voice to its own specifier and assigns it another  $\theta$ -role. These observations have the following consequences. If the raised external argument is the co-argument DP of an anaphor in a reflexive structure, this has the (entirely epiphenomenal) consequence that, enroute to being raised to Spec, *ko*P, this DP now escapes the binding domain (PerspP) it previously shared with the anaphor. From its new raised position in Spec, *ko*P, the external argument can thus now antecede the anaphor without violating anti-locality. Psych predicates, I suggest, are already lexicalized with this much functional structure, and thus the addition of *ko* is not necessary to license reflexivity.

## 2 The perspectival nature of anaphora in Tamil

Long-distance anaphora, in languages that display this phenomenon, has typically been characterized as being “subject-oriented” in the literature (see Koster & Reuland, 1991, and the citations therein for an initial description). Such a characterization was supposed to capture the restriction that such anaphors could typically be anteceded by syntactic subjects but not by objects in a number of languages, like Icelandic (Sigurðsson, 1990, 2010; Reuland, 2001a, a.o.), Italian (Bianchi, 2003; Giorgi, 2006, 2010), Malayalam (Jayaseelan, 1997), Chinese (Huang & Tang, 1991; Huang & Liu, 2001), Norwegian (Helan, 1988) and others.

At first glance, non-local anaphora in Tamil also seems to be subject-oriented in this manner. Thus, in (10), the medial object *Kristin* may not antecede *ta(a)n* in the unmarked discourse scenario; only the superordinate subjects *Sandhya* and *Sudha* may do so:

- (10)  $[_{CP} \text{Sandhya}_i \text{ nene-tt-aa} [_{CP} \text{Sudha}_j \text{ Kristin-ki} \text{t} \text{t} \text{æ}_k [_{CP}$   
 $\text{Sandhya.NOM think-PST-3FSG Sudha.NOM Kristin-OBL}$   
 $\text{Champa tan}_{\{i,j,*k\}} \text{ vii} \text{t} \text{t} \text{ü-kk} \text{ü mu:} \text{ü} \text{ maasatt-} \text{ükk} \text{ü}$   
 $\text{Champa.NOM ANAPH.GEN house-DAT three month-DAT}$   
 $\text{var-} \text{üv-aa} [ \text{ünn} \text{ü so-nn-aa} [ \text{nn} \text{ü} ] ] ] ]$   
 $\text{come-FUT-3FSG-COMP say-PST-3FSG}$   
 ‘Sandhya<sub>i</sub> thought [<sub>CP</sub> that Sudha<sub>j</sub> told Kristin<sub>k</sub> [<sub>CP</sub> that Champa will come to  
 her<sub>\{i,j,\*k\}</sub> house for three months]]’

However, there are systematic exceptions to this subject-restriction: an observation that is incidentally crosslinguistically robust, having been made for anaphoric systems in Italian (Giorgi, 2006, 2010), Malayalam (Jayaseelan, 1997), Japanese (Sells, 1987) and even English (Minkoff, 2003) among others, as well. In psych-predications, for instance, the chosen antecedent is not the syntactic subject, but the experiencer object, as in (11):

- (11)  $[_{CP} [_{DP} \text{Taan}_{\{i,*j\}} \text{ avva} [ \text{av} \text{ü ee} \text{.} \text{æ-jaag} \text{æ ir} \text{ünd-ad} \text{ü} ] \text{ Raman-} \text{æ}_i$   
 $\text{ANAPH[NOM] so poor-ADJ be-PST-3NSG.NOM Raman-ACC}$   
 $\text{rombæ-vee baadi-jir} \text{ü-kkir-ad} \text{ü.} ]$   
 $\text{very-EMPH affect-be-PRS-3NSG}$

“ $[_{DP} \text{His}_{\{i,*j\}}$  having been so poor] has really affected  $\text{Raman}_i$  very much.”

(11) shows that it is not necessary to be a subject to antecede an anaphor in Tamil. (12) shows that it is not sufficient either — if the subject is non-sentient, it cannot antecede (unless, of course, it is anthropomorphized, as in a fairy-tale scenario):

- (12)  $\text{Tan-akkü}_{\{i,*j\}}$   $\text{pinnaalæ}$   $\text{iru-nd-æ}$   $\text{maratt-æ}$   $\text{ko.ɽendæ}_i$   $/*\text{va} \text{ṇ} \text{d} \text{ɨ}_i$   $\text{id} \text{ɨ-tt-ad} \text{ü}$ .  
 ANAPH-DAT behind be-PST-REL tree-ACC child.NOM/car.NOM hit-PST-3NSG  
 “[The child] $_i$  hit  $[_{DP}$  the tree  $[_{CP}$  that was  $[_{PP}$  behind itself $_{\{i,*j\}}$ ]]].”  
 “\* $[_{DP}$  The car] $_i$  hit  $[_{DP}$  the tree  $[_{CP}$  that was  $[_{PP}$  behind itself $_i$ ]]].” (Intended)

Part of what made the subject-orientation proposal appealing was that it lent itself readily to a standard syntactic analysis of long-distance binding (see e.g. the I-to-I movement analyzes of Pica, 1987; Huang & Tang, 1991, and relativized subject hypothesis of Manzini & Wexler (1987); Progovac (1993)). But such an approach is sharply undermined by logophoric sentences like that in (13) below — where the anaphor refers to a discourse-salient antecedent across the sentence boundary (see e.g. Clements, 1975; Sells, 1987; Kuno, 1987; Hellan, 1988; Koopman & Sportiche, 1989; Sigurðsson, 1990; Pearson, 2013, a.o. for crosslinguistic evidence to the same effect):

- (13)  $\text{Ko.ɽendæ}_i$   $\text{a.ɽ} \text{ü-d-ad} \text{ü}$ .  $\text{Tan-akkü}_{\{i,*j\}}$   $\text{romba}$   $\text{pasittad} \text{ü}$ .  
 child.NOM cry-PST-3NSG. ANAPH-DAT very hungry.  
 “[The child] $_i$  wept. It $_{\{i,*j\}}$  was very hungry.”

In fact, the unifying property of anaphoric antecedence in Tamil (and potentially also in languages like Icelandic, Italian, Malayalam, Japanese, and others) is not syntactic subjecthood, but perspective-holding: in particular, “A potential antecedent of *ta(a)n* is a nominal which [denotes an individual that has] a mental, temporal or spatial perspective with respect to a CP, PP, or DP in which the anaphor is a participant (i.e. thematic argument)” (Sundaresan, 2012, 70, see also Sundaresan, 2016b). To understand what this means more concretely, consider a simplified version of the sentence in (10), as in (14) below:

- (14) [CP Sudha<sub>j</sub> Kristin-ki[tæ<sub>k</sub> [CP Champa tan<sub>{j,\*k}</sub> vii[tü-kkü mu:ŋü  
 Sudha.NOM Kristin-OBL Champa.NOM ANAPH.GEN house-DAT three  
 maasatt-ükkü var-üv-aa[-ünnü] so-nn-aa].  
 month-DAT come-FUT-3FSG-COMP say-PST-3FSG  
 ‘Sudha<sub>j</sub> told Kristin<sub>k</sub> [CP that Champa will come to her<sub>{j,\*k}</sub> house for three  
 months]’

(14) combines the use of the anaphor *ta(a)n* in the innermost clause with that of another perspective-sensitive item, namely ‘come’. Relative locative expressions like ‘come’ and ‘go’ have long been known to be perspective-sensitive items (or PSIs) in the sense that the truth or falsity of propositions containing such expressions is relative to the point-of-view or perspective of a perspective-center (PC) or judge (see Mitchell, 1986; Fillmore, 1997; Oshima, 2006, a.o. for discussion). Thus, given that I live in Leipzig, I cannot utter (16); I must say (15); however, when embedded under an attitude-verb, either ‘come’ or ‘go’ may be used (17) (as long as the attitude-holder — in this case *Champa* — does *not* live in Leipzig):

- (15) Sudha is coming to Leipzig next month.  
 (16) # Sudha is going to Leipzig next month.  
 (17) Champa said [CP that Sudha is going/coming to Leipzig next month]

I’ll assume the following discourse context for (14): Sudha, like her friend Kristin, lives in Berkeley; Champa lives in Chennai; the sentence is uttered by me, in Leipzig. To understand the relevance of perspective for *ta(a)n*, we need to contrast this sentence with the minimally varying one in (18):

- (18) \* [CP Sudha<sub>j</sub> Kristin-ki[tæ<sub>k</sub> [CP Champa tan<sub>{j,\*k}</sub> vii[tü-kkü mu:ŋü  
 Sudha.NOM Kristin-OBL Champa.NOM ANAPH.GEN house-DAT three  
 maasatt-ükkü poo-v-aa[-ünnü] so-nn-aa].  
 month-DAT go-FUT-3FSG-COMP say-PST-3FSG  
 ‘Sudha<sub>j</sub> told Kristin<sub>k</sub> [CP that Champa will go to her<sub>j</sub> house for three months]’

In (18), the PSI ‘come’ has been replaced with another, namely ‘go’. But this yields ungrammaticality. What’s even more interesting is that such ungrammaticality does not



obtain when ‘go’ co-occurs with a coreferent pronoun instead of the anaphor *ta(a)n*, as in (19):

- (19) [CP Sudha<sub>j</sub> Kristin-ki[tæ<sub>k</sub> [CP Champa ava]<sub>{j,\*k}</sub> vii[tũ-kkũ mu:ũ  
Sudha.NOM Kristin-OBL Champa.NOM she.GEN house-DAT three  
maasatt-ũkkũ poo-v-aa[-ũnnũ] so-nn-aa[]].  
month-DAT go-FUT-3FSG-COMP say-PST-3FSG  
‘Sudha<sub>j</sub> told Kristin<sub>k</sub> [CP that Champa will go to her<sub>j</sub> house for three months]’

These patterns are precisely what we expect if *ta(a)n* is also a PSI and its antecedence governed by the condition on perspective-holding described above. (19) is fine because ‘go’ can be interpreted from the spatial perspective of the utterance-context speaker (me) who lives in Leipzig, and the deictic pronoun *ava* [‘she’] places no independent perspectival restrictions. In contrast, (18) is ungrammatical because ‘go’ again must be interpreted from the spatial perspective of me in Leipzig, but the use of *ta(a)n* places independent perspectival restrictions that force the chosen antecedent (*Sudha*) to be the perspective-holder. We thus have two clashing perspectives in a local domain, yielding ungrammaticality. Finally, in (14), there is no clash at all, because the locative PSI used here is ‘come’ not ‘go’, which is compatible with *Sudha*, the chosen antecedent of the anaphor, being the perspective-holder.<sup>1</sup>

The mental perspective-holding condition on antecedence correctly explains the subject-orientation in the unmarked discourse scenario (seen in sentences like (10)) and excludes the syntactic objects because, for *independent* reasons having to do with how grammatical functions are mapped onto thematic roles, subjects — functioning as Agents and Experiencers — tend to denote perspective-holders in natural language (see Mitchell, 1986, for discussion of the correlation between  $\theta$ -roles and perspective-taking). The advantage of this approach is that it can also be extended to account for antecedence in structures involving logophoric dependencies, as in (13): here again, the antecedent is the entity

<sup>1</sup>For detailed data and discussion showing that PSIs in a local domain must “shift together”, i.e. must always denote the same perspective-holder — akin to the Shift Together generalization proposed for shifted indexicals (Anand & Nevins, 2004) — see Bylinina, McCready, & Sudo (2014).

denoting the mental perspective holder with respect to the proposition containing the anaphor. The object antecedence in (11) is also no longer puzzling: the experiencer object denotes the mental perspective holder with respect to the predication containing the THEME anaphor, so this is the chosen antecedent for the anaphor in the unmarked discourse scenario. Finally, the ban on non-sentience is also explained, assuming that perspective-holding requires some kind of sentience. Building on prior work concerning the semantics of self-ascription (Lewis, 1979, a.o.), Sundaresan & Pearson (2014) propose that all perspectival predicates quantify over elements of a set that are designated by a sentient entity as candidates for the actual time, location or world of that entity. The difference between spatial, temporal, and attitudinal/psych predicates, lies merely in the choice of this coordinate.<sup>2</sup>

Formal, theoretical accounts of perspectival anaphora still remain relatively sparse in the literature and, as far as I am aware, focus primarily on the semantic and pragmatic aspects of this phenomenon. Part of what makes the Tamil data relevant is that it provides evidence that perspectival dependence on anaphora must already be encoded at the level of syntax. Such evidence comes from verbal agreement. Normally, agreement on the verb is triggered by the nominal marked nominative; but when this nominative DP is the anaphor *ta(a)n*, the agreement is not obviously triggered by the anaphor (e.g. the agreement may be 1st person even though the anaphor itself may never take 1st-person antecedents); it is also not triggered by the antecedent of the anaphor (which

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<sup>2</sup>Thus, a PSI like ‘behind’ in (12) would have a lexical entry like that in (i), with *Khorastic* being analogous to *Doxastic*, but for locations rather than beliefs (Sundaresan & Pearson, 2014, 15):

- i.  $\llbracket \textit{behind} \rrbracket^{c,x,t,w,g} = \lambda x \lambda y \lambda z. \forall s' [s' \in \textit{Khorastic}_{x,w,t} \rightarrow y \text{ is behind } x \text{ in } w \text{ at } t \text{ relative to } s']$ . Where:
  - a.  $\textit{Khorastic}_{x,w,t} = \textit{Khorastic}_{\textit{perceptual}_{x,w,t}}$  or  $\textit{Khorastic}_{\textit{imagined}_{x,w,t}}$ ;
  - b.  $\textit{Khorastic}_{\textit{perceptual}_{x,w,t}} = \{s' : \text{it is compatible with } x\text{'s perceptual experience in } w \text{ at } t \text{ for } s_{x,w,t} \text{ to be } s'\}$ , where  $s_{x,w,t}$  = the spatial coordinate of  $x$  in  $w$  at  $t$ .
  - c.  $\textit{Khorastic}_{x,w,t} = \textit{Khorastic}_{\textit{imagined}_{x,w,t}}$  only if:
    - a.  $x = \textit{Speaker}(c)$ , and
    - b. there is some contextually salient entity  $u$  such that for every element  $s'$  of  $\textit{Khorastic}_{\textit{imagined}_{x,w,t}}$ , it is compatible with what  $x$  believes in  $w$  at  $t$  for  $u$  to be located at  $s'$ .

may have different  $\phi$ -features from the agreement and also be non-local to it); nonetheless, it seems to track the antecedent (i.e. its features vary as a function of its identity).<sup>3</sup> So I conclude that, in these special cases, the agreement must be triggered by a third element in the local domain — e.g. a silent pronoun (or *pro*). But in addition to triggering agreement, this *pro* must also mediate the dependency between the anaphor and its antecedent: this would explain why the agreement tracks the antecedent. Given that anaphora in Tamil is perspectival, this *pro* must then also be perspectival: more broadly, then, perspectival information must be syntactically accessible (and available at the point of triggering  $\phi$ -agreement).

In particular, I propose that the perspectival *pro* is introduced in the specifier of a Persp head (in a Perspectival Phrase or PerspP) and encodes the perspectival center (PC). Although it is by default set to denote the utterance-context speaker, it can shift to denote other salient perspective-holders under relevant circumstances, e.g. in attitude complements. In clauses with a successfully bound perspectival anaphor it denotes the individual corresponding to the antecedent. The real binder of the anaphor is then not the apparent antecedent but the *pro* in its local Spec, PerspP (see Koopman & Sportiche, 1989, for an earlier proposal along these lines), which then counts as its local binding domain. This *pro* mediates the relationship between the anaphor and its antecedent in the evaluation context, which thus corefer by transitivity (see Sundaresan, 2012, 2016b, for a lot more detail, data and discussion of these points, and Sundaresan, 2016a for more on the agreement patterns).

A central further component of the proposal, which will turn out to be crucial in the pages ahead, is that there is one unique Persp (and thus one unique perspectival *pro*) per (structural) domain (see Bylinina et al., 2014, for crosslinguistic evidence from

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<sup>3</sup>Specifically, 1st-person agreement on the verb is triggered only when the anaphoric antecedent is the agent of a speech predicate in the immediately superordinate clause. In all other cases, obligatory 3rd-person agreement is triggered on the verb. What this shows is that the 1st-person agreement is somehow sensitive to the structural position and thematic properties of the anaphoric antecedent though not its actual  $\phi$ -features.

perspective shifting for this point). What counts as a perspectival domain may well be parametrized. With respect to Tamil, at least (certain) CPs, PPs, and DPs count as perspectival domains. I will turn to the status of VP/*v*P below, since these will be central to the discussion of reflexives. Evidence for this comes from the fact that *ta(a)n* can be perspectivally anteceded across all these domains, and that anaphors can be shown to have different antecedents just in case they are in different domains. Under the proposal briefly sketched here, this means that the extended projections of (certain) CPs, PPs, and DPs must contain Persp. More recently, Nishigauchi (2014) and Charnavel (2015) have argued, on the strength of data from “empathic” binding in Japanese and “exempt” anaphora in French, respectively, that grammatical perspective must be syntactically represented in this manner in these languages as well.

### 3 Back to reflexivity in Tamil

We have just seen that anaphora in Tamil is perspective-driven: i.e. a DP cannot serve as an antecedent unless it denotes a perspective-holder along the mental or spatio-temporal dimensions toward the minimal PerspP containing the anaphor. We can now return to cases of reflexivity in this language and see how they fare against this baseline.

#### 3.1 Reflexivity is also perspectival

A survey of the descriptive conditions on antecedence in reflexive structures in Tamil makes it apparent that reflexivity, too, is perspective-driven. First, the nominals that are allowed to serve as reflexive antecedents in *ko* constructions are AGENTS (as in (3) or EXPERIENCERS (as in (6a) and (7a): DPs that, by virtue of their thematic roles, readily denote perspective holders (the latter invariably along the mental dimension, the former along the mental or spatio-temporal dimensions) in the unmarked discourse scenario. The non-sentience restriction on antecedence, observed in cases of long-distance anaphora

(see again (12)) obtains in reflexive structures in Tamil as well. (21) is degraded to the point of ungrammaticality in the discourse scenario in (20):

(20) Scenario: There is a vibrating alarm clock on a small, rickety bedside table. This morning, the alarm clock vibrated violently and, as a consequence of its own vibrations, slid to the edge of the table and fell down to the floor.

(21) \* Gadɪgaaram<sub>i</sub> kii.ɪæ vi.ɪ-ũndũ tann-æ<sub>i</sub> tu||am-tu||am-aagæ  
 clock[NOM] down fell-ASP ANAPH-ACC small-small-ADJ  
 oɖe-čču-ko-ɳɖ-adũ.  
 smash-ASP-ko|-PST-3NSG  
 “[The clock]<sub>i</sub> fell down and smashed itself<sub>i</sub> into smithereens.” (Intended)

But if the clock in (21) is magically made to come alive, as in context of the *Beauty and the Beast* fable, say — a reading we can accentuate by replacing ‘fall’ with an agentive verb like ‘jump’ — the sentence becomes licit; the same DP *gadɪgaaram*, denoting this anthropomorphized, suicidal clock, may now indeed antecede the anaphor:

(22) Gadɪgaaram<sub>i</sub> kii.ɪæ kudi-čč-ũ tann-æ<sub>{i,\*j}</sub> tu||am-tu||am-aagæ  
 clock[NOM] down jump-ASP ANAPH-ACC small-small-ADJ  
 oɖe-čču-ko-ɳɖ-adũ.  
 smash-ASP-ko|-PST-3NSG  
 “[The clock]<sub>i</sub> jumped down and smashed itself<sub>{i,\*j}</sub> into smithereens.”

Assuming, as we did earlier, that non-sentience is banned because it is incompatible with perspective-holding (see again Fn. 2), this again underscores the relevance of perspective-holding for reflexivity in Tamil. For these reasons, I will propose that reflexivity, just like all other kinds of anaphoric dependency in Tamil, is perspective-driven. That is, the antecedent of the anaphor *ta(a)n* must denote some individual who holds a perspective, mental and/or spatio-temporal, towards some predication containing the anaphor. Given the background of structural perspective described so far, this entails the following:

(23) The complement of *ko|* contains a Perspectival Phrase (or PerspP) with a perspectival *pro* that locally binds the anaphor. In *ko|*-reflexives, the co-argument of the

anaphor corefers with this perspectival *pro*.

Right at the outset, it should be noted that the idea that reflexivity in Tamil is perspectival describes a somewhat striking state of affairs. Reflexivity in English, for instance, does not seem to be perspectival in the same way. Thus, under the scenario given in (20), the English counterpart of the Tamil sentence in (21) would be perfectly licit. But I believe that English and English-like languages are the norm, while Tamil and Tamil-like languages are the exception. Reflexives in Tamil are able to be perspectival only because it has recourse to the morpheme *ko*l.

### 3.2 A structural restriction: or why perspectival reflexivity is special

We started this paper with the observation that, in the general case, reflexivity in Tamil obtains only in the presence of the *ko*l morpheme suffixed to the main predicate, yielding the minimal pair repeated below:

- (24) \*  $Kalpana_i$        $tann-\mathfrak{ae}_{\{i,*j\}}$        $ki||-in-aa|$ .  
Kalpana.NOM ANAPH-ACC.SG pinch-PST-3FSG  
“ $Kalpana_i$  pinched herself<sub>*i*</sub>.” (Intended)
- (25)  $Kalpana_i$        $tann-\mathfrak{ae}_{\{i,*j\}}$        $ki||-i-kko-ŋd-aa|$ .  
Kalpana.NOM ANAPH-ACC.SG pinch-ASP-*ko*l-PST-3FSG  
“ $Kalpana_i$  pinched herself <sub>$\{i,*j\}$</sub> .”

Informally, (24) shows that the co-argument of the anaphor is unable, by itself, to antecede the anaphor: i.e. *Kalpana* is unable to denote a perspective-holder relative to some predication (whatever this may be) containing the anaphor. (25) shows that the addition of *ko*l fixes this problem: i.e. in (25), *Kalpana* is suddenly able to denote a perspective-holder with respect to some predication containing the anaphor, thus is now able to antecede it. In Section 2, I argued that the perspectival *pro* in Spec, PerspP corefers with the antecedent in the evaluation context and binds the anaphor *ta(a)n* at LF; thus, the anaphor and antecedent corefer indirectly, by transitivity. Formally, therefore, the

observations regarding (24)-(25) entail (26):

- (26) The perspectival *pro* that binds *ta(a)n* and a co-argument of the anaphor typically cannot corefer. Exceptions: *ko* reflexives; psych predications.

I propose that (26) ensues from a seemingly trivial (in fact, definitional) property of reflexives — namely that they constitute the only instance where the antecedent of the anaphor is also its co-argument. Relevant empirical evidence has been brought to bear in recent work by Bylinina et al. (2014); Bylinina & Sudo (2015) based on crosslinguistic data involving perspective-shifting with respect to various structural domains, which can help us figure out why this might yield (26). In particular, they argue that VP, i.e. the constituent containing the V + internal argument (but not the external argument) is not a shifting domain because, when a PSI appears as the main predicate, it cannot shift its perspectival center to the subject of that sentence.<sup>4</sup> Under the current proposal, this would translate into the following:

- (27) There is no Persp between VP and Voice, i.e. between the internal and external arguments. In reflexive structures, the anaphor and its co-argument are contained inside the same minimal PerspP.

I would like to argue that this essentially leads to an anti-locality effect, where the anaphor and its co-argument are simply too close together for the latter to serve as antecedent. To see why, consider what would happen if, in a sentence like (24), the co-argument of the anaphor *Kalpana* could indeed antecede the anaphor. I.e. *Kalpana* would corefer with the perspectival *pro* (that binds *ta(a)n*) in Spec, PerspP, in contradiction of (26). But we have just seen in (27) that the anaphor and its co-argument are both contained inside the same local PerspP. This means that *Kalpana* would not only corefer

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<sup>4</sup>The authors provide examples like “John is handsome”, where the (perspectival) TASTE- predicate ‘handsome’ has to be evaluated from the utterance-context speaker’s perspective and cannot be evaluated from that of John. In contrast, in “If a handsome man comes in, John will be startled”, the PSI ‘handome’ is ambiguous and may be evaluated either from the speaker’s perspective or from John’s.

with the perspectival *pro* in the evaluation context, it would also be asymmetrically c-commanded by it in the structure. This would lead to a Condition C violation. Replacing *Kalpana* with a pronoun like *ava* (‘she’) wouldn’t improve matters much, because it would yield a Condition B violation instead. Either way, the derivation would crash. To generalize:<sup>5</sup>

- (28) **Explanation for (26)** (but not its exceptions): In perspectival anaphora, an antecedent is a nominal that corefers with the perspectival *pro* in Spec, PerspP that binds the anaphor. In reflexive structures, the intended antecedent is also the co-argument of the anaphor, and is thus contained in the same local PerspP as the anaphor (27). So, the antecedent not only corefers with *pro*, it is also asymmetrically c-commanded by it, yielding violations of Conditions B or C, causing a crash.

The goal of the rest of this paper is to explain the exceptions to this rule, in particular to investigate what special properties *ko* brings to the table that allow the anti-locality ban on reflexivity to be lifted. At the end of the paper I will turn, though more briefly, to the second kind of exception, namely that of psych reflexives.

## 4 Interactions between *ko* and reflexivity

The argumentation in (28) allows us to clarify in structural terms the kind of repair strategy that the presence of *ko* must make possible, which in turn feeds reflexivity. In *ko*-reflexives like (25), the co-argument and the anaphor must not be contained inside the same local PerspP. Rather, the co-argument must be outside the minimal PerspP

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<sup>5</sup>It must, of course, be noted that violations of Conditions B and C are tolerated to a much greater degree than are violations of Condition A, and can be significantly ameliorated by factors like contrastive focus. This has led to speculation that the former do not involve transgressions of narrow-syntactic principles but of interface conditions or, perhaps, even Neo-Gricean principles. A discussion of these issues is outside the scope of this paper (see Hicks, 2009, for an excellent summary). What is relevant here is, simply, that having the co-argument be properly embedded within the minimal perspectival domain creates a configuration that is independently dispreferred, however this may be implemented.



containing the anaphor. Here, I will argue that this becomes possible because *ko* has the following properties. It spells out a head above Voice, and introduces below it a PerspP that is also above Voice. It is a thematic raising predicate (Ramchand, 2008) with an affectedness semantics: it raises the external argument from Spec, VoiceP to its own Spec. In *ko*-reflexives, this external argument is the co-argument of the anaphor. But in its new raised position in Spec, *ko*P, it is no longer asymmetrically c-commanded by the *pro* in the Spec, PerspP introduced below *ko*. There is thus no Condition B/C violation when *pro* and the co-argument corefer. Such coreference may thus licitly obtain, yielding perspectival reflexivity.

#### 4.1 The structural properties of *ko*

In this section, I will motivate the first piece of the proposal, namely that *ko* instantiates a head above VoiceP, so that the PerspP it introduces is also above VoiceP.<sup>6</sup> As part of this, I will briefly show that *ko* is not itself an instantiation of Voice.

As it happens, *ko* may also be suffixed onto unaccusatives, as in (29) below:

- (29) Marakki|æ            (sumaj-læ) va|æ-nḡ-ḡ-kko-ḡ-adũ.  
       Tree branch.NOM weight-LOC bend-ASP.INTR-*ko*-PST-3NSG  
       ‘The tree branch became bent (under its weight).’ (Rough translation)

The distribution of *ko* in Tamil thus seems initially reminiscent of the (partial) syncretism between reflexive and unaccusative structures observed in Greek, Slavic, Romanic, and German (Embick, 2004; Sportiche, 1998; Schäfer, 2008; Medová, 2009, a.o., and see Lidz, 2001 for such a proposal for *ko* in the related Dravidian language, Kannada). However, closer inspection reveals that the distribution of *ko* in Tamil is independent of the valency of the predicate. First, *ko* is actually optional on unaccusatives (29):

- (30) Marakki|æ            sumaj-læ    va|æ-nḡ-adũ.  
       Tree branch.NOM weight-LOC bend-ASP.INTR-3NSG

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<sup>6</sup>Recall that there can be no PerspP *under* VoiceP.

“The tree branch bent (under its weight).”

Second, *ko* not only appears on reflexives and unaccusatives but may also be suffixed, again optionally, onto non-reflexive transitives (31):<sup>7</sup>

- (31) Sudha        marakki|æ-jæ    va|æ-ččũ-kko-ŋd-aa|.  
Sudha.NOM tree branch-ACC bend-ASP.TR-*ko*|-PST-3FSG  
‘Sudha bent the tree-branch.’

Third and finally, there is morphological evidence that *ko* spells out a head distinct from Voice, coming from gemination yielding morphophonological voicing contrasts in the verbal stem (see Sundaresan & McFadden, To appear, for data and discussion). Consider (32) below:

- (32) **Linear sequence of verb-forms with *ko*:**

*va*|æ-*n*čũ-*ko*-ŋd-*adũ*    = ROOT-ASP.INTR-KO|-PST-3NSG

*va*|æ-ččũ-*ko*-ŋd-*aa*    = ROOT-ASP.TR-KO|-PST-3FSG

Thus, *va*|æ-*n*čũ-*kko*- in the intransitive (29), contrasts with *va*|æ-ččũ-*kko*- in the transitive (31) with respect to gemination and voicing on the morpheme above the verbal root. This suffix amalgamates transitivity (representing the Voice head) with an aspect head (Amritavalli & Jayaseelan, 2005). In Sundaresan (2012), I present arguments that what is involved is a head *Asp<sub>res</sub>* that yields a derived result state from the main event encoded by its complement (VoiceP in transitives). I.e.  $\llbracket Asp_{res} \rrbracket = \lambda R_{\langle s, t \rangle} \lambda s_s \exists e. R(e) \wedge Result(e, s)$ . Informally, It existentially binds off the event in its complement and introduces a result state to it.

What is important to note here is that *ko* in these forms appears *after* the morpheme -*n*čũ/čč- where the gemination alternation appears, which marks transitivity and thus realizes the Voice head. That is, *ko* is independent of Voice, realizing a distinct syntactic

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<sup>7</sup>In the example in (31), I explicitly gloss the transitivity morpheme as such as this is the focus of the discussion, but don’t do so for the other examples in this paper for reasons of perspicuity.

head which I call Mid (see Sundaresan & McFadden, To appear, for detailed argumentation with respect to these points). Based on the discussion so far, we may summarize the properties of *ko* as follows:

- (33) *ko* spells out a head Mid, which is above  $Asp_{res}$ , which is above Persp, which is above Voice. I.e.  $Mid > Asp_{res} > Persp > Voice$ .<sup>8</sup>

## 4.2 The meaning contribution of *ko*

In this section, I turn to the question of the meaning contribution of *ko*. Specifically, I will motivate the idea that it is a thematic raising predicate in the manner described above with an affectedness (Jackendoff, 1990; Beavers, 2011a,b) semantics.

### 4.2.1 Affectedness reading

The addition of *ko* to most verbs in Tamil is actually optional. This allows us to consider a wide cross-section of different transitive, unergative and unaccusative verbs (examples of verbs were taken from Levin, 1993) and construct sentential minimal pairs around them with and without *ko*. Such minimal pairs then give us a way to tease apart the meaning contribution of *ko* by itself. As an example, consider the transitive pair below:

- (34) Mansi paal-æ uutt-in-aa].  
 Mansi milk-ACC pour-ASP--PST-3FSG  
 ‘Mansi poured the milk.’
- (35) Mansi paal-æ uutt-i-kko-ṇḍ-aa].  
 Mansi milk-ACC pour-ASP-*ko*-PST-3FSG  
 ‘Mansi poured the milk for herself.’ READING 1  
 ‘Mansi poured the milk on herself.’ READING 2

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<sup>8</sup>The relative hierarchy of Persp with respect to  $Asp_{res}$  is unclear. I assume that  $Asp_{res}$  is merged above Persp but nothing serious hinges on this choice, as far as I can see. A different option might be to assume that  $Asp_{res}$  includes additional perspectival properties and is thus a semantically mixed category of sorts: thanks to John Beavers (p.c.) for this idea. A different point that should be mentioned here has to do with selection. In particular, I do not assume that *ko* selects PerspP, but that their relative position is handled in terms of a rigid functional sequence or Extended Projection.

(34) has the straightforward meaning that Mansi poured milk. The addition of *ko* to the verb in (35) adds the reading that Mansi poured the milk *for* herself or, alternatively, that she poured the milk *on* herself (accidentally). I.e. *ko* contributes a reading of affectedness — namely, that the AGENT Mansi became affected by the end result (or outcome) of the pouring event in some sense. Readings 1 and 2 share the core meaning of affectedness but differ in terms of whether this affectedness reading is interpreted in a mental or spatial sense. Reading 1 has a *mental* affectedness reading: i.e. Mansi poured the milk and the end result of the pouring event benefitted her in some way (see Jackendoff, 1990, for the idea that benefactiveness is a type of affectedness). Reading 2 has a *spatial* affectedness reading: i.e. Mansi poured the milk and the end result of the milk physically affected her in some way (e.g. she spilled the milk on herself).

I believe the lexico-semantic meaning of *ko* is itself underspecified as to whether the affectedness is mentally or spatially interpreted. This will then be restricted both by the discourse-pragmatics and by the inherent meaning of the main predicate to which *ko* attaches. For instance, the addition of *ko* to an inherently directed motion verb is quite degraded with the reading that Raman was spatially/physically affected by the outcome of this event. Given that the event of falling down already involves a notion of affectedness to the physical body of Raman, any additional affectedness reading contributed by *ko* is superfluous, thus marked. However, an affectedness reading along the *mental* dimension may still be contributed by *ko* (to the extent that *vi.ɥ* ('fall'), like its English counterpart, may be coerced into an agentive reading) — e.g. in a scenario where Raman deliberately fell down (or, perhaps more precisely, dropped down) to avoid being seen.

- (36) Raman            *kii.ɥ vi.ɥ-nd-aan/??vi.ɥ-nd-ko-kko-ɥd-aan*.  
          Raman[NOM] down fall-PST-3MSG/??fall-ASP-*ko*-PST-3MSG  
          "Raman fell down."

Other types of affectedness reading are simply ruled out on pragmatic grounds. For instance, when *ko* attaches to the verb *adɪpaɖu* ('injure'), the resulting sentence is degraded

with *kol* altogether: a spatial affectedness reading is ruled out for the same reasons as that in (36). But a benefactive meaning is pragmatically marked too since one doesn't typically injure oneself voluntarily.

The affectedness contributed by *kol* thus places restrictions on the types of verb that *kol* may attach to. As mentioned, with most classes of predicate, *kol*-suffixation is actually optional, but some verbs occur more readily with the suffix than others. Verbs that are readily compatible with an affectedness reading such as grooming, postural, and self-benefactive verbs frequently co-occur with *kol*, as with *vaa.ũ* ('comb') in (37) below:

- (37) Krishnan            talai-jæ    vaar-i-ko-ŋd-aan.  
 Krishnan[NOM] hair-ACC comb-ASP-*kol*-PST-3MSG
1. PHYSICAL AFFECTEDNESS READING: "Krishnan combed the hair and came to be physically affected by the outcome of this event." I.e. "Krishnan combed his (own) hair."
  2. MENTAL AFFECTEDNESS READING: "Krishnan<sub>i</sub> combed his (or someone else's) hair and came to be mentally affected by the outcome of this event."

The structure in (37) with *kol* is, in fact, the standard way to express the reading that Krishnan combed his own hair. However, we may also understand the contribution of *kol* in (37) along the mental dimension: (37) would then mean that Krishnan combed the hair (his own or someone else's) but that the result of the hair-combing event mentally benefited him in some way.

In contrast, verbs which don't take thematic arguments at all, like weather verbs and raising predicates, are incompatible with *kol*; verbs of creation and disappearance ('die') are also degraded with *kol*, which is also unsurprising, given that the argument is not present through all the relevant stages of the event.<sup>9</sup> Also incompatible are verbs whose meaning is at odds with the kind of affectedness semantics that *kol* contributes, e.g. *kuđũ* ('give'). This fails to readily combine with *kol* for the same reason that *self*-benefactive

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<sup>9</sup>E.g. with 'die', the individual denoted by the argument cannot be (mentally or spatially) affected by the outcome her death simply because she, by definition, ceases to exist after her death.

verbs are so readily compatible with it: the affectedness reading in *ko|*-structures applies to the external argument in the transitive structures under discussion, so a structure that already involves a distinct affected internal argument (i.e. the GOAL), is at odds with this (see also Lidz & Williams, 2005, for discussion of related Kannada facts).<sup>10</sup>

#### 4.2.2 *ko|* vs. psych verbs

We had observed at the beginning of this paper that *ko|* is incompatible with psych verbs (see again the examples in (8)-(9); the latter is repeated below). A closer look shows us that *ko|* is significantly more degraded with stative psych predicates than with eventive ones. Consider a stative psych predication with and without *ko|*:

- (38) Abinaya      Dhanush-æ    virũmbũ-gir-aa|/\*virũmb-i-kko|-gir-aa|.  
 Abinaya.NOM Dhanush-ACC love-PRS-3FSG/love-ASP-*ko|*-PRS-3FSG  
 “Abinaya loves Dhanush.”

Recall (cf. (33)) that *ko|* itself attaches to a resultative aspectual head ( $Asp_{res}$ ) which is merged with the main event (VoiceP in transitives) and creates a result state out of it. This means that the meaning that *ko|* introduces applies not to the main predication (encoded by VoiceP), but to the outcome (or derived result state) of that predication — this is precisely what we observed with the *ko|*-sentences seen so far. But a result state can only be created out of an event, not out of a state (a point that is implicit in the denotation for  $Asp_{res}$ ). This entails that *ko|* cannot be combined with stative predicates like *vi.ũmbũ* ‘love’ in (38). Confirming this point is the fact that *ko|* is actually licit with certain eventive psych predicates, like *baja-* (‘fear’) below:<sup>11</sup>

<sup>10</sup>Interestingly, and as may be expected, *ko|* is still possible in these structures as long as we can find a discourse context where the external argument may *also* be construed as affected, as in a context where Sudha gives her boss, Champa, an expensive book for her birthday to win her favor in (i) below:

- i. Sudha Champa-ki|tæ pustagatt-æ kuḍũ-ttũ-kko-ṇḍ-aa|.  
 Sudha Champa-TO book-ACC give-ASP-*ko|*-PST-3FSG  
 “Sudha gave the book to Champa.”

<sup>11</sup>(39) and (40) have nearly identical meanings. *ko|* is presumably still contributing an additional mental affectedness reading that then pertains to the experiencer, but it is as yet unclear what this is.

- (39) Raman            baja-nd-aan.  
        Raman[NOM] fear-PST-3MSG  
        “Raman got scared.” (Rough translation)
- (40) Raman            baja-ndũ-kko-ŋd-aan.  
        Raman[NOM] fear-ASP-*ko*[-PST-3MSG  
        “Raman got scared.”

### 4.2.3 Thematic raising and the rebounding effect

Regardless of how the affectedness reading of *ko* is actually formalized, it is clear that it involves a kind of “rebounding” effect commonly noted with certain types of middles crosslinguistically (see Kemmer, 2003). Informally, the outcome of the main event predication that *ko* attaches to comes back to affect one of the participants of that same event. In the transitive structures we have primarily considered here, this has been the external argument of that event.<sup>12</sup> This, indeed, is why *ko* was seen to be degraded with predicates which apply the affectedness reading to a new argument – as with verbs like ‘give’. In this sense, *ko* is not an applicative head (à la Pylkkänen, 2008): it doesn’t introduce a *new* argument into the structure and assign it an affectedness reading. Rather, the affectedness semantics of *ko* applies to an argument that has already been merged in the structure — namely to the external argument in its complement, in Spec, VoiceP. Here, I’ll model this observation in two steps. First, I’ll propose that the affectedness semantics of *ko* applies as a  $\theta$ -role to the argument that is merged in its specifier. Second, this argument must be internally, not externally, merged: i.e. it must be *raised* into this position from within the structure. This, indeed, is what yields the rebounding effect, ensuring that the meaning of *ko* will affect an individual that is already a participant of the main event (Ramchand, 2008). In transitives, this is the external argument in Spec, VoiceP: this DP gets an Agent  $\theta$ -role from Voice and then raises up to Spec-MidP to get

<sup>12</sup>This restriction is, incidentally, absolute. The affected argument in a transitive structure must be the external argument and cannot be the internal one. This can simply be modelled as a function of Minimality: the external argument is closer to the Mid head than *ko* spells out that is the internal one.

an additional affectedness role from Mid.

Many aspects of the precise meaning of *ko* remain to be worked out and formalized. For instance, it is not entirely clear what the unified notion of affectedness is that underlies the contribution of *ko* in unaccusatives (see again (29) with ‘bend’) and transitives. A promising line of investigation might be the proposal in Beavers (2011b) which argues that affectedness involves a transition between states on some scale, with different kinds of affectedness involving different scales. I leave this for future research.

## 5 Back to the beginning: reflexives and *ko*

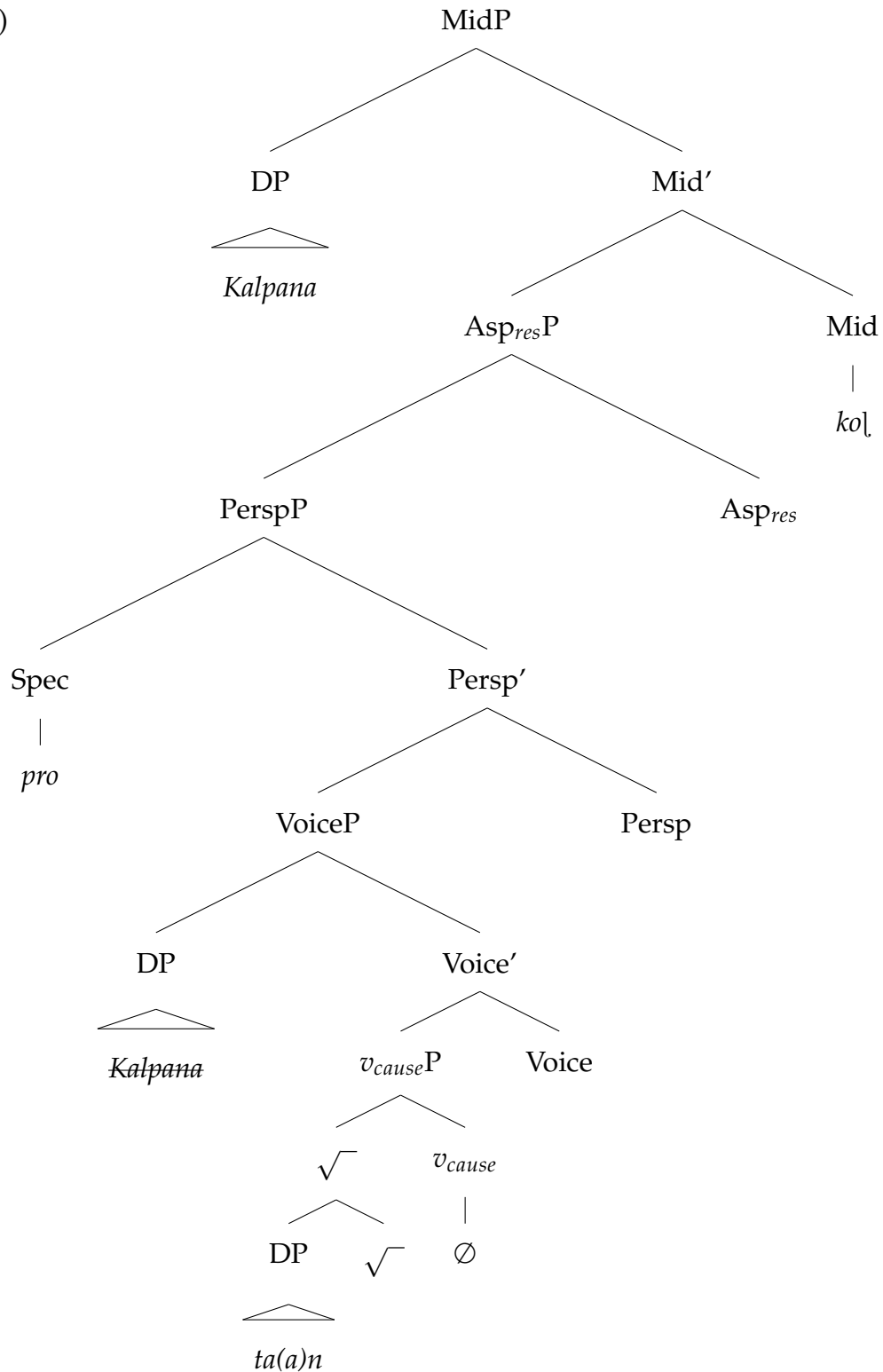
The discussion so far has established that *ko* spells out a Mid(dle) head that selects a PerspP in its complement, which is crucially above VoiceP. Furthermore, I have argued that Mid is a thematic raising predicate. We now have all the pieces of the puzzle needed to understand why *ko* is required for reflexive anaphora in the standard case, i.e. with non-psych predicates.

Consider again a *ko*-reflexive like that in (3), repeated below which, given what we’ve argued, must have the structure given in (42):

- (41) Kalpana<sub>i</sub>      tann-æ<sub>{i,\*j}</sub>      kil|i-ko-ŋd-aal.  
 Kalpana.NOM ANAPH-ACC.SG pinch-ASP-*ko*-PST-3FSG  
 “Kalpana<sub>i</sub> pinched herself<sub>{i,\*j}</sub>.”



(42)



The matrix subject *Kalpana* is externally merged in Spec, VoiceP where it is assigned an AGENT  $\theta$ -role. It is then thematically raised up to the Spec, MidP where it is assigned

an additional Affectee  $\theta$ -role by Mid, identifying it as the affected argument of the result state of the main event in the scope of Mid.<sup>13</sup> As a result of this, *Kalpana*, which had earlier been properly contained inside the minimal PerspP containing the anaphor, now bears scope outside the PerspP. From this new raised position in Spec, MidP, it can thus corefer with the *pro* in Spec, PerspP without inducing a Condition C violation. As such, it can licitly antecede *ta(a)n* in (41).<sup>14</sup> When *Kalpana* is the only salient antecedent available, as in (41), it is also the chosen antecedent, yielding reflexive anaphora. When there are other potential antecedents available, as in (5) – repeated below — then either might be chosen, yielding either reflexive anaphora due to antecedence by *Kalpana* or non-reflexive anaphora due to antecedence by *Siva*:

- (43) Siva<sub>i</sub> [<sub>CP</sub> Kalpana<sub>i</sub> tann-æ<sub>{i,j}</sub> kil-i-kko-ŋd-aa[-ünnü] nene-tt-aan.  
 Siva Kalpana ANAPH-ACC.SG pinch-ASP-ko[-PST-3FSG-COMP think-PST-3MSG  
 “Siva<sub>i</sub> thought that Kalpana<sub>j</sub> pinched him<sub>i</sub>/herself<sub>j</sub> (for his/her own benefit).”  
 (Rough translation)

Finally, to complete the paradigm, let us consider how other types of perspectival anaphora in Tamil are able to obtain in the absence of *ko*. The answer is something we have noted already. Reflexive anaphora (definitionally) instantiates the only structural configuration where the targeted antecedent of the anaphor is its co-argument; this is thus also the only configuration where the targeted antecedent starts out in the same minimal PerspP as the anaphor (recall that there is no minimal PerspP in the clausal domain that is smaller than VoiceP). In all other cases of anaphora — i.e. logophora and long-distance anaphora across CPs, PPs, and DPs — the targeted antecedent already begins its life outside the minimal PerspP containing the anaphor, thus can denote a

<sup>13</sup>Here, the salient reading is one of mental affectedness since ‘pinch’ lexically already subsumes a reading of physical affectedness.

<sup>14</sup>The precise syntactic properties of the perspectival *pro* in Spec, PerspP need to be clarified further. What is absolutely crucial to my account here is that it not count as “(pro)nominal” for the purposes of Principle B, which would otherwise be violated by a coreferring co-argument (R-expression or pronoun) in Spec, MidP. Such an approach may also be necessary to explain why it is the external argument in Spec, VoiceP and not the perspectival *pro* (which is minimally closer) that is raised to Spec, MidP.

perspective-holder, assuming independent thematic and discourse constraints on this are satisfied,<sup>15</sup> thereby qualifying as a potential antecedent for the anaphor.

We have thus explained the core *ko* patterns in reflexives and non-reflexive anaphoric structures in Tamil that we started this paper with. It is important to note, in this context, that *ko*’s interaction with reflexivity — in particular, the idea that it imbues the co-argument of the anaphor with extra properties that allow it to serve as its antecedent — is an entirely *incidental* by-product of its thematic raising property, which itself follows from the inherent meaning of the Mid head that *ko* spells out. There is no *direct* connection between *ko* and reflexivity: while (non-psych predicate) reflexives must occur with *ko*, *ko* can freely occur with non-reflexive transitives, unaccusatives and unergatives. In this sense, it is also misleading to classify *ko* as a reflexive marker.

There is one last point that still needs to be clarified. This has to do with the obligatory absence of *ko* in psych reflexives, as illustrated by the patterns repeated below:

- (44) Kalpana-vükkü<sub>i</sub> tann-æ<sub>{i,\*j}</sub> pidikkæ-læ/\*pidi-ttū-kko||æ-læ.  
 Kalpana-DAT ANAPH-ACC.SG like-NEG/\*like-ASP-*ko*-NEG  
 “Kalpana<sub>i</sub> didn’t like herself<sub>{i,\*j}</sub>.”
- (45) Abinaya<sub>i</sub> tann-æ<sub>{i,\*j}</sub> virūmbū-gir-aa/\*virumb-i-*ko*||ū-gir-aa.  
 Abinaya.NOM ANAPH-ACC.SG love-PRS-3FSG/\*love-ASP-*ko*-PRS-3FSG  
 “Abinaya<sub>i</sub> loves herself<sub>{i,\*j}</sub>.”

There are two theoretical aspects to these empirical patterns. The first is the fact that *ko* is incompatible with stative psych predicates. We have already explained why this is the case, arguing that it follows from the fact that most psych-predicates are stative and that the *Asp<sub>res</sub>* head in the complement of *ko* can only combine with eventives. As we saw, *ko* is, in fact, licit with eventive psych predicates as in (39)-(40).

The second has to do with the availability of reflexive anaphora in the absence of *ko*. Here, we must reason backwards. Reflexive anaphora in psych predications is

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<sup>15</sup>Recall that, in the unmarked discourse scenario, subjects tend to be able to denote perspective-holders more readily than objects, with the exception of EXPERIENCER objects.

also regulated by perspective: in particular, the co-argument EXPERIENCER antecedent denotes a mental perspective holder with respect to the PerspP containing the anaphor. This, in turn, must mean that psych verbs involve a structure containing a PerspP, and that the EXPERIENCER argument of a psych verb is merged (or perhaps moved) above this PerspP. If it were properly contained inside the minimal PerspP containing the anaphor, we would get a Condition B or C violation if it also anteceded the anaphor, as we have already argued.

Neither of these is an unreasonable conclusion to draw. Since psych predicates denote a mental or psychological experience, it seems reasonable to posit that they involve a mental PerspP as part of their argument-structure (much like attitude verbs do). One way to ensure that the EXPERIENCER is higher than the minimal PerspP (which would contain the anaphoric THEME argument if there is one) would be to say the argument-structure of a psych-predicate is structurally larger and more complex than those of other types of verbs and that, in particular, the EXPERIENCER is merged higher than Spec, VoiceP. Such a proposal is actually in line with others — Adger & Ramchand (2006) e.g. argue that psych predication in Scottish Gaelic involves experiencers that are base-generated higher than other stative subjects. Positing a larger structure may crucially also help explain the hitherto puzzling possibility of backward binding (Minkoff, 2003) in psych-predicate structures. This is a matter for future research.

## References

- Adger, David, & Gillian Ramchand. 2006. Psych nouns and predication. In *Proceedings of NELS*, volume 36.
- Amritavalli, R., & K.A. Jayaseelan. 2005. Finiteness and negation in Dravidian. In *The Oxford Handbook of Comparative Syntax*, ed. Guglielmo Cinque & Richard S. Kayne, 178–220. Oxford: OUP.

- Anand, Pranav, & Andrew Nevins. 2004. Shifty operators in changing contexts. In *Proceedings of SALT*.
- Beavers, John. 2011a. An aspectual analysis of ditransitive verbs of caused possession in English. *Journal of semantics* 28:1–54.
- Beavers, John. 2011b. On affectedness. *Natural Language and Linguistic Theory* 29:335–370.
- Bianchi, Valentina. 2003. On finiteness as logophoric anchoring. In *Temps et point de vue/Tense and Point of View*, ed. Jacqueline Guéron & L. Tasmovski, 213–246. Nanterre: Université Paris X.
- Bylinina, Lisa, Eric McCready, & Yasutada Sudo. 2014. The landscape of perspective shifting. Talk given at Pronouns in Embedded Contexts at the Syntax-Semantics Interface, Tübingen.
- Bylinina, Lisa, & Yasutada Sudo. 2015. The semantics of perspective sensitivity. ESSLI 2015 course lectures.
- Charnavel, Isabelle. 2015. Apparent exemption from Condition A: a perspective-based theory. [Http://ling.auf.net/lingbuzz/002683](http://ling.auf.net/lingbuzz/002683).
- Clements, G.N. 1975. The logophoric pronoun in Ewe: its role in discourse. *Journal of West African Languages* 2:141–177.
- Embick, David. 2004. Unaccusative syntax and verbal alternations. In *The unaccusativity puzzle: Explorations of the syntax-lexicon interface*, ed. E. Anagnostopoulou A. Alexiadou & M. Everaert, Oxford Studies in Theoretical Linguistics, 137–158. Oxford: OUP.
- Fillmore, Charles. 1997. *Lectures on deixis*. Stanford: CSLI.
- Giorgi, Alessandra. 2006. From temporal anchoring to long distance anaphors. *Natural Language and Linguistic Theory* .

- Giorgi, Alessandra. 2010. *Towards a syntax of indexicality*. Oxford Studies in Theoretical Linguistics. Oxford: Oxford University Press.
- Hellan, Lars. 1988. *Anaphora in Norwegian and the theory of grammar*, volume 32 of *Studies in Generative Grammar*. Dordrecht: Foris Publications.
- Hicks, Glyn. 2009. *The derivation of anaphoric relations*. Linguistik Aktuell. John Benjamins.
- Huang, C.C. James, & C.T. Jane Tang. 1991. The local nature of the long-distance reflexive in Chinese. In *Long-distance anaphora*, ed. Eric Reuland Jan Koster, 263–282. Cambridge University Press.
- Huang, James, & Luther Liu. 2001. Logophoricity, attitudes, and *ziji* at the interface. In *Long-distance reflexives*, ed. Peter Cole, Gabriella Hermon, & James Huang, 141–195. New York: Academic Press.
- Jackendoff, Ray. 1990. *Semantic structures*. Cambridge, MA: MIT Press.
- Jayaseelan, K.A. 1997. Anaphors as pronouns. *Studia Linguistica* 51:186–234.
- Kemmer, Suzanne. 2003. *The middle voice*. Typological studies in language. Philadelphia: John Benjamins.
- Koopman, Hilda, & Dominique Sportiche. 1989. Pronouns, logical variables, and logophoricity in Abe. *Linguistic Inquiry* 20:555–588.
- Koster, Jan, & Eric Reuland, ed. 1991. *Long-distance anaphora*. Cambridge: CUP.
- Kratzer, Angelika. 1996. Severing the external argument from its verb. In *Phrase structure and the lexicon*, ed. Johan Rooryck & Laurie Zaring, 109–137. Dordrecht: Kluwer.
- Kuno, Susumo. 1987. *Functional syntax – anaphora, discourse and empathy*. Chicago: Chicago University Press.

- Levin, Beth. 1993. *English verb classes and alternations: a preliminary investigation*. Chicago: University of Chicago Press.
- Lewis, David. 1979. Attitudes de dicto and de se. *Philosophical Review* 88:513–43.
- Lidz, Jeffrey. 2001. The argument structure of verbal reflexives. *Natural Language and Linguistic Theory* 19:311–353.
- Lidz, Jeffrey. 2004. Causation and reflexivity in Kannada. In *Clause structure in South Asian languages*. Springer.
- Lidz, Jeffrey, & Alexander Williams. 2005. On the absence of reflexive benefactives in Kannada. In *The Yearbook of South Asian Languages and Linguistics*, ed. Tanmoy Bhattacharya Rajendra Singh, 237–254. Berlin: Mouton de Gruyter.
- Manzini, Rita, & Ken Wexler. 1987. Parameters, binding theory, and learnability. *Linguistic Theory* 18:413–444.
- Medová, Lucie. 2009. Reflexive clitics in the Slavic and Romance languages. Doctoral dissertation, Princeton University.
- Minkoff, Seth. 2003. Consciousness, backward coreference, and logophoricity. *Linguistic Inquiry* 35:485–494.
- Mitchell, Jonathan. 1986. The formal semantics of point of view. Doctoral dissertation, University of Massachusetts, Amherst, MA.
- Nishigauchi, Taisuke. 2014. Reflexive binding: awareness and empathy from a syntactic point of view. *Journal of East Asian Linguistics* 23:157–206.
- Oshima, David. 2006. Perspectives in reported discourse. Doctoral dissertation, Stanford University, Stanford, CA.

- Pearson, Hazel. 2013. The sense of self: Topics in the semantics of de se expressions. Doctoral dissertation, Harvard University, Cambridge.
- Pica, Pierre. 1987. On the nature of the reflexivization cycle. In *Proceedings of NELS 17*, ed. J. McDonough & B. Plunkett. University of Massachusetts, Amherst, GLSA.
- Progovac, Liljana. 1993. Long-distance reflexives: movement to Infl versus relativized SUBJECT. *Linguistic Inquiry* 24:755–772.
- Pylkkänen, Liina. 2008. *Introducing arguments*. Cambridge, Mass: MIT Press.
- Ramchand, Gillian. 2008. *Verb meaning and the lexicon: a first phase syntax*. Cambridge: Cambridge University Press.
- Reinhart, Tanya, & Eric Reuland. 1993. Reflexivity. *Linguistic Inquiry* 24:657–720.
- Reuland, Eric. 2001a. Anaphors, logophors, and binding. In *Long-distance reflexives*, ed. Peter Cole, Gabriella Hermon, & C.-T. James Huang, 343–370. London: Academic Press.
- Reuland, Eric. 2001b. Primitives of binding. *Linguistic Inquiry* 32:439–492.
- Reuland, Eric. 2011. *Anaphora and language design*. Cambridge, Mass.: MIT Press.
- Schäfer, Florian. 2008. *The syntax of (anti-)causatives. external arguments in change-of-state contexts*, volume 126 of *Linguistik Aktuell*. Philadelphia: John Benjamins.
- Sells, Peter. 1987. Aspects of logophoricity. *Linguistic Inquiry* 18:445–479.
- Sigurðsson, Halldór Ármann. 1990. Long distance reflexives and moods in Icelandic. In *Modern Icelandic syntax*, ed. Joan Maling & Annie Zaenen, 309–346. New York: Academic Press.
- Sigurðsson, Halldór Ármann. 2010. Mood in Icelandic. In *Mood in the languages of Europe*, ed. Björn Rothstein & Rolf Thieroff, 33–55. Amsterdam: John Benjamins.



Sportiche, Dominique. 1998. *Partitions and atoms of clause structure: subjects, agreement, case, and clitics*. Psychology Press.

Sundaresan, Sandhya. 2012. Context and (co)reference in the syntax and its interfaces. Doctoral dissertation, University of Tromsø and University of Stuttgart, Tromsø.

Sundaresan, Sandhya. 2016a. Anaphora vs. agreement: a new kind of Anaphor Agreement Effect in Tamil. In *The impact of pronominal form on interpretation*, ed. Patrick Grosz & Pritty Patel-Grosz. de Gruyter, Mouton.

Sundaresan, Sandhya. 2016b. Perspective is structural: evidence from anaphora. *Lingbuzz*: <http://ling.auf.net/lingbuzz/002893>.

Sundaresan, Sandhya, & Thomas McFadden. To appear. The articulated *v* layer: evidence from Tamil. In *The verbal domain*, ed. Roberta D'Alessandro, Irene Franco, & Ángel Gallego. Oxford: Oxford University Press.

Sundaresan, Sandhya, & Hazel Pearson. 2014. Formalizing linguistic perspective: insights from spatial anaphora. Paper based on talk given at LAGB 2014: <http://ling.auf.net/lingbuzz/002270>.

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