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

Sandhya Sundaresan

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1 Overview

The goal of this paper is to analyze the nature of the 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 and 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 than do standard cases of anaphora where the antecedent and anaphor are not co-arguments.

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*ḷ" 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*ḷ. The minimal pair in (2)-(3) show reflexive variants of this sentence without and with *ko*ḷ, respectively, and illustrate that *ko*ḷ cannot be licitly omitted

in a standard reflexive construction:

(1) Kalpana Siva-væ kiḷḷ-in-aaḷ.
Kalpana.NOM Siva-ACC pinch-PST-3FSG
"Kalpana pinched Siva."

(2) * Kalpana$_i$ tann-æ$_i$ kiḷḷ-in-aaḷ.
Kalpana.NOM ANAPH-ACC.SG pinch-PST-3FSG
"Kalpana$_i$ pinched herself$_i$." (Intended)

(3) Kalpana$_i$ tann-æ$_{\{i,*j\}}$ kiḷḷi-ko-ṇḍ-aaḷ.
Kalpana.NOM ANAPH-ACC.SG pinch-*koḷ*-PST-3FSG
"Kalpana$_i$ pinched herself$_{\{i,*j\}}$."

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 *koḷ*, however. In (5), the sentence in (2) now a CP embedded under an attitude verb. The resulting complex sentence 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 *koḷ*:

(4) Siva$_i$ [$_{CP}$ Kalpana$_j$ tann-æ$_{\{i,*j\}}$ kiḷḷ-in-aaḷ-ŭnnŭ] nene-tt-aan.
Siva Kalpana ANAPH-ACC.SG pinch-PST-3FSG-COMP think-PST-3MSG
"Siva$_i$ thought that Kalpana$_j$ pinched him$_{\{i,*j\}}$."

That said, nothing prevents *koḷ* 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 *koḷ*-morpheme marking the embedded verb:

(5) Siva$_i$ [$_{CP}$ Kalpana$_i$ tann-æ$_{\{i,j\}}$ kiḷḷi-ko-ṇḍ-aaḷ-ŭnnŭ] nene-tt-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*ḷ 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*ḷ: co-argument anaphora (or reflexive dependencies) require the concomitant presence of *ko*ḷ, 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-vŭkkŭ$_i$ tann-æ$_{\{i,*j\}}$ piḍikkæ-læ.
Kalpana-DAT ANAPH-ACC.SG like-NEG
"Kalpana$_i$ didn't like herself$_{\{i,*j\}}$."

b. * Kalpana-vŭkkŭ$_i$ tann-æ$_i$ piḍittŭ-kkoḷḷæ-læ.
Kalpana-DAT ANAPH-ACC.SG like-*ko*ḷ-NEG
"Kalpana$_i$ didn't like herself$_i$." (Intended)

(7) Psych reflexive with nominative subject:

a. Abinaya$_i$ tann-æ$_{\{i,*j\}}$ virŭmbŭ-gir-aaḷ.
Abinaya.NOM ANAPH-ACC.SG love-PRS-3FSG
"Abinaya$_i$ loves herself$_{\{i,*j\}}$."

b. * Abinaya tann-æ$_i$ virumbi-*ko*ḷḷŭ-gir-aaḷ.
Abinaya.NOM ANAPH-ACC.SG love-*ko*ḷ-PRS-3FSG
"Abinaya$_i$ loves herself$_i$." (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*ḷ from that exhibited by non-psych reflexives like those in (2)-(3): i.e. reflexive anaphora obtains in the obligatory absence of *ko*ḷ. It can, furthermore, be shown that the ban on *ko*ḷ 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*ḷ is disallowed in the

non-reflexive counterparts of the psych predications in (6)-(7), as well, as shown below:

(8) Kalpana-vŭkkŭ Siva-væ piḍikkæ-læ/*piḍittŭ-kkoḷḷæ-læ.
Kalpana-DAT Siva-ACC like-NEG/*like-*koḷ*-NEG
"Kalpana didn't like Siva."

(9) Abinaya Dhanush-æ virŭmbŭ-gir-aaḷ/*virŭmbi-kkoḷ-gir-aaḷ.
Abinaya.NOM Dhanush-ACC love-PRS-3FSG/love-*koḷ*-PRS-3FSG
"Abinaya loves Dhanush."

We thus have potentially three classes of anaphora in Tamil. Class I structures involve standard reflexives (i.e. reflexives under non-psych predicates) which require the presence of *koḷ*. Class II involves non-reflexive anaphora, i.e. long-distance anaphora and logophora — and obtains in the absence of *koḷ* (though its presence is not banned). Class III involves reflexives under psych predicates and requires the absence of *koḷ*; however, this ban on *koḷ* seems to be independent of reflexivity and driven by an incompatibility with psych predicates more generally.

The goal of this paper is to make sense of these patterns and to investigate the role of *koḷ* in the distribution of reflexivity in this language. I will set aside the matter of Class III psych reflexives for the time being and focus on Class I and Class II anaphoric structures. Non-reflexive anaphoric structures (Class II) are much more common than reflexive ones (Class I); morphosyntactically, as well, *koḷ*-less structures are trivially less marked than ones with *koḷ*. For these reasons, I will treat Class II structures, instantiating non-reflexive anaphora, as the elsewhere case in Tamil and commence my investigation with these, with the goal of establishing the theoretical baseline for anaphoric dependencies in this language. I will argue, following Sundaresan (2012) that anaphora is perspectival in Tamil, in the sense that the antecedent must denote a perspective-holder along a mental or spatio-temporal dimension with respect to some predication containing the anaphor.

Once this is established, I will move on to our special cases of reflexive anaphora (in non-psych predications) in order to understand whether these too are perspectival and, if so, why these seem to need something a little extra, i.e. *koḷ*, for reflexive-binding to

obtain. Toward the end of the paper I finally turn to reflexivity in psych predications (Class III structures) and try to understand its special characteristics which seem to involve a combination of characteristics from both Class I and Class III structures.

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 and 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 and Tang, 1991; Huang and Liu, 2001), Norwegian (Hellan, 1988) and others. Long-distance anaphora in Tamil, too, seems, at first, to be subject-oriented in this manner. Thus, in (10), superordinate object *Anand* in (10) may not function as an antecedent for the innermost anaphoric object *ta(a)n* in the unmarked discourse scenario; only the superordinate subjects *Raman* and *Seetha* may serve this function:

(10) [$_{CP}$ [$_{CP}$ Raman$_i$ Anand-kiṭṭæ$_j$ [$_{CP}$ Krishnan$_k$ tann-æ$_{\{i,l,*j,*k\}}$
Raman[NOM] Anand-ALL Krishnan[NOM] ANAPH-ACC
kaappaatt-in-aan-nnŭ] so-nn-aan-nnŭ] Seetha$_l$ nene-tt-aa-ŭnnŭ]
save-PST-3MSG-COMP say-PST-3MSG-COMP Seetha[NOM] think-PST-3FSG-COMP
naan paar-tt-een.
I[NOM] see-PST-1SG
"I saw [$_{CP}$ that Seetha$_l$ thought [$_{CP}$ that Raman$_i$ told Anand$_j$ [$_{CP}$ that Krishnan$_k$ saved him$_{\{i,l,*j,*k\}}$.]]]"

Under the fairly standard assumption that subjects occupy [Spec, TP] with direct objects located somewhere inside VP (perhaps *v*P, for indirect objects), the subject-orientation property of long-distance anaphora looks like a purely structural constraint, thus moti-

vating analyses along purely syntactic lines in the GB era (see e.g. the I-to-I movement analyzes of Pica, 1987; Huang and Tang, 1991, and relativized subject hypothesis of Manzini and Wexler (1987); Progovac (1993)).

However, as Sundaresan (2012) discusses in detail for Tamil, there are at least three main empirical problems with extending such an account to anaphoric patterns in this language. First, none of these can straightforwardly deal with logophoric dependencies — where the anaphor refers to an extra-sentential, discourse-salient antecedent — as in (11) below:

(11) Koɻændæ$_i$ aɻŭ-d-adŭ. Tan-akkŭ$_{\{i,*j\}}$ romba pasittadŭ.
child.NOM cry-PST-3NSG. ANAPH-DAT very hungry.
"[The child]$_i$ wept. It$_{\{i,*j\}}$ was very hungry."

I.e. a purely structural account would find it very difficult, if not impossible, to derive this kind of cross-sentential dependency. Of course, logophors are not unique to Tamil but have been noted in work going back to at least Clements (1975) and discussed prominently since then (see e.g. Sells, 1987; Kuno, 1987; Hellan, 1988; Koopman and Sportiche, 1989; Sigurðsson, 1990; Pearson, 2013, a.o.), so this is a problem that extends to all these other languages as well.

Even if one were to ignore logophoric relationships for the moment and treat them as being somehow special or different (a strategy that is, incidentally, not without precedent in the literature: see for instance Reinhart and Reuland, 1993; Reuland, 2001b; Hicks, 2009, among many others) – Sundaresan shows that there are systematic counter-examples to subject-orientation even within the realm of long-distance anaphora in Tamil. The first type of counter-example comes from long-distance anaphora in psych predicate structures: here, the antecedent of the anaphor is not the surface subject but an experiencer object — as illustrated in (12):

(12) [$_{CP}$ [$_{DP}$ Taan$_{\{i,*j\}}$ avvaḷavŭ eeɻæ-jaagæ irŭnd-adŭ] Raman-æ$_i$
ANAPH[NOM] SO poor-ADJ be-PST-3NSG.NOM Raman-ACC
rombæ-vee baadi-jirŭ-kkir-adŭ.]
very-EMPH affect-be-PRS-3NSG
"[$_{DP}$ His$_{\{i,*j\}}$ having been so poor] has really affected Raman$_i$ very much."

The existence of such structures has been noted in anaphoric systems in languages like Italian (Giorgi, 2006, 2010), Malayalam (Jayaseelan, 1997), Japanese (Sells, 1987) and even English (Minkoff, 2003) among others, as well. So here again, we have a problem that is not isolated to Tamil alone.

The other kind of systematic counter-example comes from sentience restrictions on anaphoric antecedence, seen in sentences like the one below:

(13) Tan-akkŭ$_{\{i,*j\}}$ pinnaalæ iru-nd-æ maratt-æ koɻendæ$_i$/*vaɳḍi$_i$ iḍi-tt-adŭ.
ANAPH-DAT behind be-PST-REL snake-ACC the child.NOM hit-PST-3NSG
"[The child]$_i$ hit [$_{DP}$ the tree [$_{CP}$ that was [$_{PP}$ behind itself$_{\{i,*j\}}$]]]."
"*[The car]$_i$ hit [$_{DP}$ the tree [$_{CP}$ that was [$_{PP}$ behind itself$_i$]]]." (Intended)

(13) is a perfectly grammatical instance of long-distance anaphora, just in case the antecedent, namely *koɻendæ* ('child'), denotes a sentient individual. However, if the intended antecedent denotes a non-sentient one, as with the DP *vaɳḍi* ('car'), the result is sharply ungrammatical. Indeed, the ban is a systematic one: nominals denoting non-sentient individuals may not antecede the anaphor in Tamil.

The systematic availability of non-subject antecedents, as in (12) shows that subjecthood is not a necessary condition on anaphoric antecedence in Tamil. Conversely, the ungrammaticality of sentences with non-sentient antecedents as in (13) shows that subjecthood is not a sufficient condition on anaphoric antecedence in this language. In addition, logophoric dependencies do not lend themselves easily to a subject-orientation analysis. Based on this kind of evidence, Sundaresan (2012) argues that the proper condition on anaphoric antecedence in Tamil (and potentially also languages like Icelandic, Italian, Malayalam, Japanese, and others) is not subjecthood, but perspective-holding: in

particular, "A potential antecedent of *ta(a)n* is a nominal which 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).

The mental perspective-holding condition on antecedence correctly picks out the syntactic subjects in (10), in the unmarked discourse scenario, and excludes the syntactic objects — because, for *independent* reasons having to do with how grammatical functions are mapped onto thematic roles — subjects seem to tend to denote perspective-holders in natural language. The advantage of this approach is that it can also be extended to account for antecedence in structures involving logophoric dependencies, as in (11): here again, the antecedent is the entity denoting the mental perspective holder with respect to the proposition containing the anaphor. The object antecedence in (12) 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 (see also Sundaresan and Pearson, 2014, for discussion of this point, particular with respect to anaphora that is regulated by spatial perspective, as in sentences like (13).). The inclusion of spatio-temporal perspective-holding as part of the condition on antecedence is to deal with the availability of spatial anaphora across PPs and CPs in Tamil. This was already exemplified by (13) above: the behindness of the tree in this sentence must be interpreted from the spatial perspective of the child, not from that of the speaker of the sentence or anyone else. Indeed, this is what it means to fix *koɻendæ* ('child') as the antecedent of the anaphor in this sentence(see Rooryck and vanden Wyngaerd, 2011, and Lødrup (2007) for illustration of very similar patterns in Dutch and Norwegian, respectively).

A primary contribution of Sundaresan (2012), in addition to showing that non-local anaphora (long-distance anaphora as well as logophora) in Tamil is perspective-driven,

is to demonstrate that this perspective must be represented in the syntax and participate in (narrow-)syntactic dependencies such as Agree. Evidence for this comes from structures involving a nominative subject anaphor in Tamil: in these cases, Sundaresan shows that the ϕ-agreement triggered on the clausemate verb of the anaphor comes, not from the anaphor or its antecedent, but from a perspectival pronoun in the local phase. Since (ϕ-)agreement is typically thought to be a morpho-syntactic phenomenon, and Tamil doesn't show evidence for semantic ϕ-agreement here or elsewhere, Sundaresan concludes from this there is a slient perspectival pronoun (*pro*) in the syntax, merged in the specifier of a Perspectival Phrase/PerspP (see Koopman and Sportiche, 1989, for an earlier proposal along these lines): this pronoun binds the anaphor and is non-obligatorily controlled by the antecedent at LF (thus corefers with it). The perspectival pronoun thus mediates the relationship between the anaphor and its antecedent at LF, which end up coreferring by transitivity. 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 reflexives

We have just seen that anaphora in Tamil is generally 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 some extended projection containing the anaphor. We can now return to cases of reflexivity in this language and see how they fare against this baseline. Below, I will argue that reflexivity in Tamil — both that involved in *koḷ*-structures like (3) and in *koḷ*-less psych reflexives like in (6a) and (7a) — is also perspectival in the same way.

Having established this, I will then propose that the ungrammaticality of (non-psych

predicate) reflexives without *ko*ḷ must be because a DP that is a co-argument of the anaphor must be unable, for some reason, to denote a perspective holder with respect to a predication containing the anaphor (thus, by extension, serve as a potential antecedent to it). The addition of *ko*ḷ must then be a repair strategy of sorts — somehow undoing the initial restrictions and allowing the co-argument to antecede the anaphor, after all.

3.1 Reflexivity is also perspective-driven

A survey of the descriptive conditions on antecedence in reflexive structures in Tamil makes it apparent that reflexivity, too, is perspective-driven.[1] First, the nominals that are allowed to serve as reflexive antecedents in *ko*ḷ 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. We observed that nominals that denote non-sentient entities are banned as antecedents in instances of long-distance anaphora (see again (13)). This same restriction is maintained in reflexives as well — (14) is degraded to the point of ungrammaticality in the unmarked discourse scenario:

(14) * Gaḍigaaram$_i$ kiiɻæ viɻ-ŭndŭ tann-æ$_i$ tuḷḷam-tuḷḷam-aagæ
clock[NOM] down fell-ASP ANAPH-ACC small-small-ADJ
oḍečču-ko-ṇḍ-adŭ.
smash-*ko*ḷ-PST-3NSG
"[The clock]$_i$ fell down and smashed itself$_i$ into smithereens." (Intended)

But if the clock in (14) 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

[1] In some sense, this may be the null hypothesis given that all other patterns of anaphora in this language are perspectival. But anaphoric systems crosslinguistically are known to distinguish reflexive dependencies from their non-reflexive counterparts (Reinhart and Reuland, 1993, et seq.) — indeed, one of the main goals of this paper is to make an argument to this effect for the data under consideration — so this is not something we can innocuously carry over without checking first.

verb like 'jump' — the sentence becomes quite licit; the same DP *gaɖigaaram*, denoting this anthropomorphized, suicidal clock, may now indeed antecede the anaphor:

(15) Gaɖigaaram$_i$ kiiɻæ kudi-čč-ŭ tann-æ$_{\{i,*j\}}$ tuḷḷam-tuḷḷam-aagæ
clock[NOM] down jump-ASP ANAPH-ACC small-small-ADJ
oɖečču-ko-ɳɖ-adŭ.
smash-*koḷ*-PST-3NSG
"[The clock]$_i$ jumped down and smashed itself$_{\{i,*j\}}$ into smithereens."

Assuming, as we did earlier, that non-sentience is banned because it is incompatible with perspective-holding, this again underscores the relevance of perspective-holding for reflexivity in Tamil. For these reasons, I will propose that reflexivity, or co-argument anaphora, 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.

3.2 A structural restriction on perspectival reflexivity

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

(16) * Kalpana$_i$ tann-æ$_{\{i,*j\}}$ kiḷḷ-in-aaḷ.
Kalpana.NOM ANAPH-ACC.SG pinch-PST-3FSG
"Kalpana$_i$ pinched herself$_i$." (Intended)

(17) Kalpana$_i$ tann-æ$_{\{i,*j\}}$ kiḷḷi-ko-ɳɖ-aaḷ.
Kalpana.NOM ANAPH-ACC.SG pinch-*koḷ*-PST-3FSG
"Kalpana$_i$ pinched herself$_{\{i,*j\}}$."

The general intuition that I will now try to further develop and formally capture is that, in such reflexives, the DP that is the co-argument of the anaphor is unable, by itself, to serve as a perspective holder to some predication (whatever this may be) containing the

anaphor. The addition of *ko*ḷ must then fix this problem somehow, allowing the DP to serve as a perspective-holder, thus in turn serve as a potential antecedent, in this manner.

A potential clue as to what this might mean more concretely lurks in the fact that non-reflexive anaphora in Tamil, which is also perspective-driven in the same way, does *not* require the presence of *ko*ḷ. What, then, distinguishes reflexive anaphora from its non-reflexive counterpart: i.e. what makes it so special?

The answer, of course, is that this is the only instance where the intended antecedent of the anaphor is also its co-argument. Though a definitional, thus trivial, property, Sundaresan (2012) argues that this has some profound consequences. In brief, it has the effect that the smallest full proposition that contains the anaphor will also contain the DP that is the targeted antecedent. This in turn has the consequence that the minimal perspectival domain that contains the anaphor will also contain its co-argument which is the targeted antecedent of this anaphor. Recent work has brought empirical evidence in favor of this position. Using the availability of perspectival shifting (between the perspective of the speaker and that of another individual, like a salient attitude holder) in various embedded contexts, Bylinina, McCready, and Sudo (2014); Bylinina and Sudo (2015) show that while CPs, PPs, and DPs are perspective-shifting domains — i.e. domains that, within this model, would be construed as hosting their own Perspectival Phrase/PerspP — VPs and maybe even *v*Ps/VoicePs do not constitute perspectival domains. In other words, the smallest perspectival domain is nevertheless still larger than a VoiceP — thus properly contains both the external and internal argument of an eventive predication.

This state of affairs turns out to have some important theoretical consequences. Sundaresan (2012, 171) proposes that a DP that is properly contained (i.e. asymmetrically c-commanded) inside the predication (PerspP) that it is meant to hold a perspective towards cannot denote a perspective-holder with respect to that PerspP. For Sundaresan, this condition is built into the definition of what perspective-holding in grammar means.

The structural restriction above makes intuitive sense: i.e. it makes intuitive sense that perspective-holding would require that the perspective-holder itself be placed "outside" the domain that is the target of perspective-holding. But we can also think of this more formally, as a restriction ensuing from violations of Binding Conditions B and C (or, alternatively, as a kind of anti-locality effect).[2] As mentioned briefly above, the PerspP hosts a silent pronominal operator in its specifier. This perspectival *pro* mediates the relationship between the anaphor and its antecedent: it corefers with the antecedent at LF and binds the anaphor. Now consider what would happen if the co-argument of the anaphor were indeed able to denote the perspective-holder with respect to the PerspP containing both the co-argument and the anaphor. In this case, the perspectival *pro* would not only corefer with the antecedent as usual, it would additionally also asymmetrically c-command it. If the co-argument is an R-expression, this would lead to a Condition C violation; if the co-argument is itself a pronoun, it would lead to a Condition B violation. Either way, the derivation would crash.[3] We can thus safely assume that this is a configuration that is dispreferred in grammar, thus avoided.

I started with the observation that co-argument anaphora, unlike other types of anaphora, instantiates the only dependency where the anaphor and its co-argument are both inside the same minimal perspectival domain (or PerspP). I then proposed that part of the definition of perspective-holding required that the nominal denoting the perspective-holder *not* be properly contained inside the perspectival domain it is meant to hold a perspective towards – as such a configuration would involve violations of Conditions B or C. These two properties in conjunction yield the result that the co-

[2]Thanks to Tom McFadden (p.c.) for suggesting this way of thinking about it.

[3]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 in turn 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.

argument of the anaphor cannot serve as the perspective-holder of the minimal PerspP containing the anaphor (and, in this case, also itself). But since perspective-holding is a pre-condition on anaphoric antecedence in Tamil, this in turn has the direct consequence that a co-argument of the anaphor is prevented from anteceding the anaphor.

As mentioned at the outset of this discussion, the addition of *ko*ḷ in the standard case (i.e. with non-psych predicates) must, then, somehow repair this problem, such that the co-argument indeed becomes available as a potential antecedent for the anaphor. Motivating this will be the focus of much of the rest of the paper. In the case of reflexive binding with psych predicates — which, as we have seen, obtains in the obligatory *absence* of *ko*ḷ — the co-argument must exceptionally be able to serve as an antecedent from the outset (i.e. even without the help of *ko*ḷ). The special properties of psych predicates must, in addition, make them be incompatible with *ko*ḷ. The case of psych predicates will be discussed toward the end of the paper.

4 Interactions between *ko*ḷ and reflexivity

Here, I will argue that *ko*ḷ spells out a syntactic head with two main syntactic and semantic properties. First, it is a light verb equivalent of an intensional (e.g. 'think') or spatial ('behind'/'where') predicate; more specifically, it is a semi-functional restructuring predicate in the sense of Wurmbrand (2001). Also, it is merged directly above a resultative aspectual head above VoiceP. Crucially, I will also propose that it selects a PerspP in its complement which is higher than VoiceP. Second, I will show that the meaning contribution of *ko*ḷ lends itself to being formally treated as a thematic raising predicate (defined along the lines of Ramchand, 2008): it raises the relevant DP from the Spec of VoiceP where it is first merged into its own specifier, where it assigns it an additional θ-role. The combination of these two properties has the following epiphenomenal consequences. *Ko*ḷ structures involve a smaller minimal PerspP between CP and VoiceP that contains the

anaphor and its co-argument. When *ko*ɭ is added, the co-argument is able to "escape" this minimal PerspP, and is thus able to denote a perspective-holder with respect to that perspectival domain. Since anaphoric antecedence is directly perspective-driven in Tamil including in cases of reflexivity, this in turn allows the co-argument to antecede the anaphor, yielding successful reflexive anaphora.

4.1 *ko*ɭ is not a voice/reflexivity marker

In this section, I will motivate the idea that *ko*ɭ is a light verb above VoiceP: as a part of this, I will show that it is not itself an instantiation of the Voice head, contra Lidz (2001, 2004, et seq.) who argues this for the *ko*ɭ morpheme in the related Dravidian language Kannada. Consider again a reflexive sentence as in (18) which requires the presence of *ko*ɭ:

(18) Sri$_i$ tann-æ$_{\{i,*j\}}$ aɖi-ččŭ-kko-ɳɖ-aan/*aɖi-čč-aan.
Sri ANAPH-ACC hit-TR-*ko*ɭ-PST-3MSG/*hit-TR-3MSG
'Sri$_i$ hit himself$_{\{i,*j\}}$.'

As it happens, *ko*ɭ is also found suffixed onto unaccusative verbs, as in (19) below:

(19) Marakkiɭæ (sumaj-læ) vaɭænʤŭ-kko-ɳɖ-adŭ.
Tree branch.NOM weight-LOC bend.INTR-*ko*ɭ-PST-3NSG
'The tree branch bent (under its weight).'

The distribution of *ko*ɭ 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.). Tamil would thus seem to lend additional support to popular analyzes according to which reflexives and unaccusatives share a structural subcomponent, and we could take *ko*ɭ be another instantiation of the Voice head (see Lidz, 2001, and subsequent, for such a proposal for *ko*ɭ in the related language, Kannada).

However, closer inspection reveals that the distribution of *ko*ɭ in Tamil is independent of the valency of the predicate. First, *ko*ɭ is actually optional on unaccusatives: thus, (19) may licitly occur without *ko*ɭ and, crucially furthermore, retains its inchoative semantics even in its absence:

(20) Marakkiɭæ sumaj-læ vaɭæ-nʤ-adŭ.
Tree branch.NOM weight-LOC bend-PST.INTR-3NSG
"The tree branch bent (under its weight)."

This is very different from the situation in languages like Romance or German, where verbs of the relevant classes can only appear as inchoatives with the reflexive-like marking. Second, *ko*ɭ not only appears on reflexives and unaccusatives but may also be suffixed, again optionally, onto non-reflexive transitives. This is illustrated in (21), which is the non-reflexive minimal variant of (19) above:

(21) Sudha marakkiɭæ-jæ vaɭæ-ččŭ-kko-ɳɖ-aaɭ.
Sudha.NOM tree branch-ACC bend-TR-*ko*ɭ-PST-3FSG
'Sudha bent the tree-branch.'

Finally, there is morphological evidence that *ko*ɭ spells out a head distinct from Voice, coming from gemination yielding morphophonological voicing contrasts of the verbal stem (see Sundaresan and McFadden, To Appear, for data and discussion). Thus, *vaɭæ-nʤŭ-kko-* in intransitive (19), contrasts with *vaɭæ-ččŭ-kko-* in transitive (21). What is important to note here is that *ko*ɭ in these forms appears *after* the aspect morpheme *-nʤ/čč-* where the gemination alternation is realized.

Data such as these show that, regardless of how *ko*ɭ is ultimately analyzed, its distribution is independent of the valency of the predicate it attaches to, and independent of the gemination alternation that Sundaresan and McFadden (To Appear) analyze as realizing the Voice head. We can thus conclude from this that *ko*ɭ spells out an independent head, which we'll call Mid for 'middle'. Syntactically speaking, Mid must be higher than Voice (as per the Mirror Principle) since it linearly succeeds the gemination that

realizes Voice. In fact, we can be even more concrete. Consider again the unaccusative and transitive verb-clusters with *koɭ* from (19) and (21), respectively:

(22) **Linear sequence of verb-forms with *koɭ*:**

vaɭæ-nʤŭ-ko-ɳɖ-adŭ = ROOT-INTR.PST-KOɭ-PST-3NSG

vaɭæ-ččŭ-ko-ɳɖ-aaɭ = ROOT-TR.PST-KOɭ-PST-3FSG

The transitivity marker (indicated by the phonological gemination alternation, as discussed above) is homorganic with what looks like a past tense marker. In fact, *koɭ* seems to be sandwiched between two past tense markers. However, in terms of the interpretation, only one of them — specifically, the morpheme that follows *koɭ* — indicates genuine semantic tense. The one below it retains its morphological form across the tenses and also doesn't affect the temporal interpretation of the resulting sentence. As such, it is treated as an aspectual marker, rather than a temporal one (Amritavalli and Jayaseelan, 2005).

This seems to be further supported by the fact that there are systematic aspectual restrictions placed on the classes of predicate *koɭ* may lictly combine with (Sundaresan, 2012). In brief, *koɭ* may not combine with predicates that are incompatible with the addition of a result state, like emissives and bare statives. However, *koɭ* can combine with verbs denoting activities, accomplishments, and achievements, all of which lack an inherent telos. What seems to be relevant, therefore, is not that the predicate be inherently telic but that it be compatible with an applied result state. If indeed the frozen past-tense morpheme is an aspectual marker, it seems plausible that this result state semantics is precisely what it contributes. Clinching evidence for this conclusion comes from the fact that, when this aspectual marker occurs in a predicate cluster without *koɭ*, it contributes a telos to interpretation of the predicate. This is illustrated below:

(23) Raman (*maɳikkaɳakkaa) pustagatt-æ paɖi-ččŭ-vej-čč-aan.
Raman[NOM] for.hours book-ACC read-ASP-KEEP-PST-3MSG
"Raman finished reading (*for hours)." (rough translation)

Sundaresan (2012, 132, Ex. 173) thus proposes that the aspectual morpheme between the verbal root and *ko*ḷ encodes a derived result state, and spells out a resulative aspectual head "Asp$_{res}$":

(24) $[\![Asp_{res}]\!] = \lambda R_{<s,t>} \lambda s_s \exists e.R(e) \wedge Result(e,s)$[4]

Consider what the implications of this discussion are within the context of the perspectival model of anaphora discussed here. Independent evidence (see again Bylinina et al., 2014; Bylinina and Sudo, 2015) has shown that *v*P/VoiceP does not contain a perspectival domain (i.e. a PerspP). So if *ko*ḷ were an instantiation of the Voice head, this would have been a potential problem, because we would not also be able to argue that *ko*ḷ introduces a PerspP in its complement. However, the evidence presented above has shown quite conclusively that the head that *ko*ḷ spells out is merged above the VoiceP — i.e. *ko*ḷ takes a resultative Asp$_{res}$P as its complement and this Asp$_{res}$P contains VoiceP. While this doesn't by itself say anything conclusive about whether *ko*ḷ selects a PerspP or not — it crucially also doesn't stand in the way of such an analysis.

4.2 Meaning contribution of *ko*ḷ

In this section, I zoom in on the meaning contribution of the *ko*ḷ morpheme with the help of two types of data, both presented in Sundaresan (2012). The first involves the results of a grammaticality judgment task conducted with an online questionnaire completed by 38 native speakers of Tamil. These give us a preliminary and intuitive idea of the kind of meaning that *ko*ḷ contributes. The second investigates minimal pairs involving predicates (culled from the verb classes delineated in Levin, 1993) with and without *ko*ḷ, in order to isolate the meaning contribution of this morpheme. These will be shown to confirm the intuitions from the judgment task.

[4] In less formal terms, the aspectual head existentially binds off the event in its complement and introduces a result state to it.

The native speaker informants were presented with minimal pair sentences built on transitive verbs with and without *ko*ɭ, as in (25) below:

(25) Raman Krishnan-æ paar-tt-aan/paarttŭ-kko-ɳɖ-aan.
Raman[NOM] Krishnan-ACC see-*ko*ɭ-PST-3MSG
"Raman saw-*ko*ɭ Krishnan."

The informants were asked to rate the grammaticality of the minimal pairs on a five-point scale against each of the discourse contexts provided below:

Scenario 1 *Raman and Krishnan are playing hide-and-seek. Today, it's Krishnan's turn to hide but Raman can't find him for the longest time. At last, just as Raman is about to give up, he happens to catch sight of Krishnan crouching under the table in the corner of the room.*

Scenario 2: *Krishnan is a petty thief who, as Raman has just realized, has stolen Raman's cash and escaped in the nick of time. Before Krishnan gets away, however, Raman makes sure to get a good look at Krishnan's face — just in case he ever sees him again.*

Under Scenario 1, most judged the *ko*ɭ-less variant to be perfectly grammatical; in contrast, very few deemed the *ko*ɭ-variant acceptable with this reading. Under Scenario 2, the results were strikingly different: the majority of the respondents found the *ko*ɭ-variant in to be grammatical and the *ko*ɭ-less variant to be less so. Both types of responses followed from native-speaker intuitions regarding interpretive differences between the *ko*ɭ- and *ko*ɭ-less variants. In particular, the *ko*ɭ-less variant was understood to merely assert that Raman saw Krishnan. The *ko*ɭ-variant, on the other hand, seems to have the additional reading that it was undertaken by the agent (Raman) in order to benefit or otherwise affect himself in some way. The accidental seeing event described in Scenario 1 is thus much more degraded with *ko*ɭ than is the deliberate act of seeing described in Scenario 2.

These preliminary judgments are confirmed when we look more closely at minimal pairs of different Levin (1993) classes of verbs with and without *ko*ɭ. Consider (26a) vs.

(26b) below:

(26) a. Mansi paal-æ uutt-in-aaɭ.
Mansi milk-ACC pour.TR-PST-3FSG
'Mansi poured the milk.'

b. Mansi paal-æ uutti-kko-ɳɖ-aaɭ.
Mansi milk-ACC pour.TR-*koɭ*-PST-3FSG
'Mansi poured the milk for herself.' READING 1

'Mansi poured the milk on herself.' READING 2

(26a) has the straightforward meaning that Mansi poured milk. The addition of *koɭ* to the verb in (26b) adds the reading that Mansi poured the milk *for* herself or, alternatively, that she poured the milk *on* herself (accidentally). I.e. *koɭ* contributes a reading of affectedness — namely, that the AGENT Mansi *came to be affected* by the end result or outcome of the pouring event came in some way. Sundaresan (2012) further argues that the difference between Reading 1 and Reading 2 in (26b) has to do with whether the affectedness is interpreted in a mental or physical sense: something that is also a function of the discourse context and the lexical-conceptual semantics of the main verb; she proposes that the meaning of *koɭ* itself is underspecified as to this.[5]

We have already seen that there are aspectual restrictions on the class of predicate that *koɭ* can combine with: in particular, verbs that are incompatible with the addition of a result state are incompatible with *koɭ*. In addition, Sundaresan (2012) shows that the affectedness reading contributed by *koɭ* places thematic restrictions on the types of verb (lexically classified as in Levin, 1993) that *koɭ* may be suffixed to. With most classes of predicate, the addition of *koɭ* is actually optional. Verbs that are readily compatible with an affectedness reading such as grooming, postural, and self-benefactive verbs frequently co-occur with *koɭ*, as illustrated below for the grooming verb *vaarŭ* ('comb'):

(27) Krishnan talai-jæ vaar-i-ko-ɳɖ-aan.
Krishnan[NOM] hair-ACC comb-ASP-*koɭ*-PST-3MSG

[5]In unaccusatives, Sundaresan proposes that the addition of *koɭ* contributes the same kind of affectedness reading, but that this applies not to an EA (which is of course lacking), but to the internal argument.

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$_i$ combed his (or someone else's) hair and came to be mentally affected by the outcome of this event."

The structure in (27) with *koḷ* is, in fact, the standard way to express the reading that Krishnan combed his own hair. However, we may also understand the contribution of *koḷ* in (27) along the mental dimension, though this is pragmatically definitely more marked, thus much harder to obtain: (27) would then mean that Krishnan combed the hair (his own or someone else's) but that the result of the hair-combing event mentally affected him in some way.

As may be expected, verbs which don't introduce thematic arguments at all, like weather verbs, are incompatible with *koḷ*. Also incompatible are verbs whose meaning is at odds with the kind of affectedness semantics *koḷ* contributes. Alter-benefactive verbs like *kuḍŭ* ('give') are an example: these are illicit with *koḷ* for the same reason that *self*-benefactive verbs are so compatible with it. The affectedness reading in *koḷ*-structures applies to the external argument in the transitive structures under discussion: so an alter-benefactive structure where the affected argument is explicitly a new (oftentimes "applied") argument is directly at odds with this (see also Lidz and Williams, 2005, for discussion of related Kannada facts).[6]

Finally, *koḷ* is also degraded with verbs whose lexical-conceptual meaning subsumes

[6]Interestingly, and as may be expected by now, *koḷ* is still licit in these structures, as long as we can find a discourse context where both the external argument and the applied argument introduced by the alter-benefactive verb may be affected in different ways: i.e. where both may be construed as affected arguments. Consider the sentence below:

i. Sudha Champa-kiṭṭæ pustagatt-æ kuḍŭ-ttŭ-kko-ṇḍ-aaḷ.
Sudha Champa-to book-acc give-asp$_{res}$-*koḷ*-pst-3fsg
"Sudha gave the book to Champa."

While certainly marked in general, (i) is considerably improved in a scenario where Sudha's act of giving the book to Champa may also be construed as benefitting or otherwise affecting Sudha in some way – e.g. in a context where Sudha gives her boss, Champa, an expensive book for her birthday to win her favor.

some kind of mental or spatial affectedness. Inherently directed motion verbs are an example of the latter; their dispreference of *koḷ* is illustrated below:

(28) Raman kiiɻæ viɻŭ-nd-aan/??viɻŭ-ndŭ-ko-ɳḍ-aan.
Raman[NOM] down fall-PST-3MSG/??fall-ASP-*koḷ*-PST-3MSG
"Raman fell down."

The more readily available reading with the addition of *koḷ* in (28), in the unmarked discourse scenario, is that Raman fell down and that the result of this falling physically affected Raman in some way. But since the event of falling down already involves a notion of affectedness to the physical body of Raman (i.e. Raman is the physical undergoer of the action), the affectedness reading contributed by *koḷ* is superfluous — thus, illicit on grounds on grammatical economy. Interestingly, and further supporting this analysis, an affectedness reading along the *mental* dimension may still be contributed by *koḷ* (to the extent that *viɻŭ* ('fall'), like its English counterpart, may be coerced into an agentive reading): this is, in fact, the only reading under which *koḷ* is permitted in this sentence. Such a sentence would thus have the reading that Raman fell down and that the outcome of this event mentally affected Raman in some way – e.g. in a scenario where Raman deliberately fell down (or, perhaps more precisely, dropped down) to avoid being seen.

Moving on to the realm of mental affectedness brings us, finally, to the case of psych verbs. The experiencer of a psych predication essentially refers to an individual who is mental affected by the experience that the psych predicate denotes. The semantics of mental affectedness is thus already subsumed as part of the lexical-conceptual meaning of the psych predicate. We had observed at the beginning of this paper that *koḷ* is incompatible with psych verbs (see again the examples in (8)-(9); the latter is repeated below):

(29) Abinaya Dhanush-æ virŭmbŭ-gir-aaḷ/*virŭmbi-kkoḷ-gir-aaḷ.
Abinaya.NOM Dhanush-ACC love-PRS-3FSG/love-*koḷ*-PRS-3FSG
"Abinaya loves Dhanush."

I had noted, at that juncture, that this incompatibility is independent of reflexivity. We now have an explanation for this pattern: the mental affectedness reading contributed by *ko*ḷ is already subsumed by that of the psych predicate, making *ko*ḷ, again, superfluous, thus illicit.[7]

4.3 Selection of PerspP and thematic raising

The two preceding sections have established that *ko*ḷ spells out a head above a stative resultative aspectual head Asp_{res} which itself is merged higher than VoiceP. In terms of meaning, both the grammaticality judgment tasks conducted among native speakers using different discourse scenarios, and a comparison of minimal pairs with and without *ko*ḷ across Levin (1993) verb classes, show that it introduces a meaning of affectedness. Whether this affectedness is interpreted along the mental or spatial dimensions is a function of the lexical-conceptual meaning of the predicate that *ko*ḷ attaches to and discourse-contextual factors. In addition to this, Sundaresan (2012) shows that *ko*ḷ does not bear the properties of a full-on lexical verb: i.e. even though the verbal complex containing *ko*ḷ looks superficially similar to that of a serial verb construction, which Tamil manifests elsewhere, *ko*ḷ does not behave like a serial verb: e.g. it cannot be re-ordered or modified by an adverb. Rather, Sundaresan shows that *ko*ḷ behaves more like a light verb, and argues that its hybrid combination of lexical properties (e.g. thematic restrictions on its distribution) and functional ones (e.g. rigid complementation and inability to function as the sole verb in a clause) make it look very much like a semi-functional restructuring predicate in the sense of Wurmbrand (2001).

Two conclusions may be drawn from these observations. First, as has been noted, Tamil is particularly promiscuous in the range of structural environments in which long-

[7]For some reason, while it was possible to have the spatial verb in (28) be interpreted along the mental dimension to some degree, it is very difficult, if not outright impossible, to interpret a psych-eventuality in a spatial way: thus, the EXPERIENCER in such a structure stubbornly clings to its experiencer-hood, regardless of the discourse-context. It is unclear at this juncture why this should be; the answer might be simply that psych-verbs lack a physical component to their denotations altogether.

distance anaphora is allowed to obtain. In brief, such anaphora is attested in the complement of intensional verbs of all classes and also into the complement of all spatio-temporal predicates. We thus get long-distance anaphora across CPs, PPs, as well as DPs. All instances of anaphora in Tamil are perspectival, as we have seen; Sundaresan thus argues that all spatio-temporal and intensional predicates in Tamil select a PerspP in their complements. The first conclusion I will draw from this is, therefore, that *koḷ*, as a light verb equivalent of such predicates, also selects a PerspP in its complement. We noted earlier that there can be no PerspP below VoiceP — but since, as we have seen, *koḷ* is merged above VoiceP, this is not an issue. We assume, therefore, that the PerspP is below *koḷ* and above VoiceP.

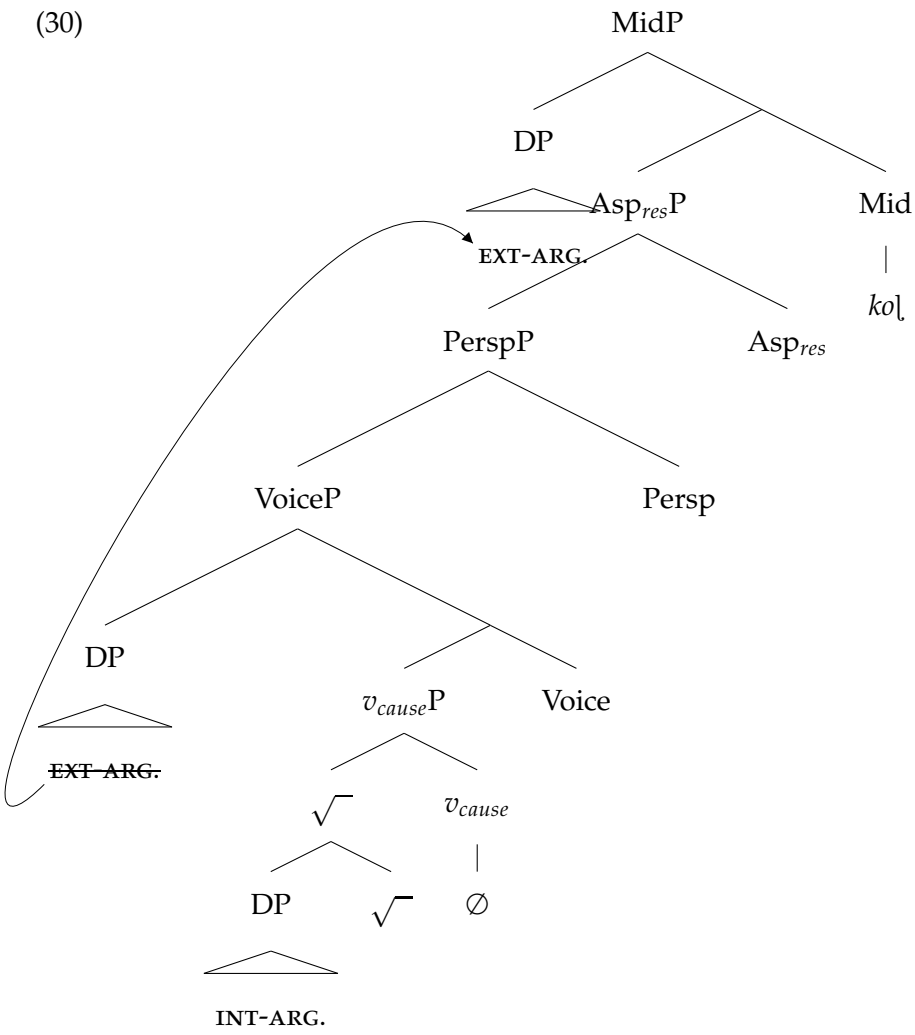
The second conclusion to be drawn stems directly from the "rebounding" effect that was observed in relation to the affectedness reading contributed by *koḷ*. This effect which, incidentally, is commonly noted with certain types of middles crosslinguistically (see Kemmer, 2003) is due to the fact that the outcome of the main event comes back to affect one of the participants of that same event. In the transitive structures we have primarily considered here, this was the external argument. This, indeed, is why *koḷ* was seen to be degraded with predicates which apply the affectedness reading to a new argument – as with alter-benefactives like 'give'. Although *koḷ* introduces an affectedness semantics, it doesn't apply this to a new argument: formally, it is not an applicative in the sense of Pylkkänen (2008).

Sundaresan (2012) models this intuition in two steps. First, she proposes that the affectedness semantics of *koḷ* applies as a θ-role to the argument that is merged in its specifier. Second, this argument must be internally, not externally, merged. This, indeed, is what yields the rebounding effect, ensuring that the meaning of *koḷ* will affect an individual that is already a participant of the main event. Sundaresan implements this intuition within the Ramchand (2008) model of thematic raising, proposing that the highest argument in the scope of the Mid(dle) head that *koḷ* spells out is raised to its

specifier. In a transitive structure like the ones we have seen here, the highest argument is the external argument in Spec-VoiceP. This DP gets an Agent θ-role from Voice and then raises up to Spec-MidP to get an additional affectedness role from Mid.[8]

We may thus propose the following templatic structure for a transitive sentence with *koɭ*:[9]

(30)



[8]It is worth noting, incidentally, that although *koɭ* itself attaches to a stative resultative, the output of a *koɭ* structure itself is eventive (following the "immer noch" diagnostic for stative vs. eventive descriptions in Kratzer, 2000); Sundaresan takes this to mean that *koɭ* binds off the result state and introduces an inchoative sub-event with a BECOME-like meaning: the external argument of the main event is then identified as the (affected) argument of this new sub-event.

[9]The other functional heads below *koɭ* are the Voice head that introduces the external argument in its Spec and a verbalizing causative head that is merged directly above a DM-style root — and do not concern us here: see Sundaresan and McFadden (To Appear) for detailed motivation and discussion of this structure.

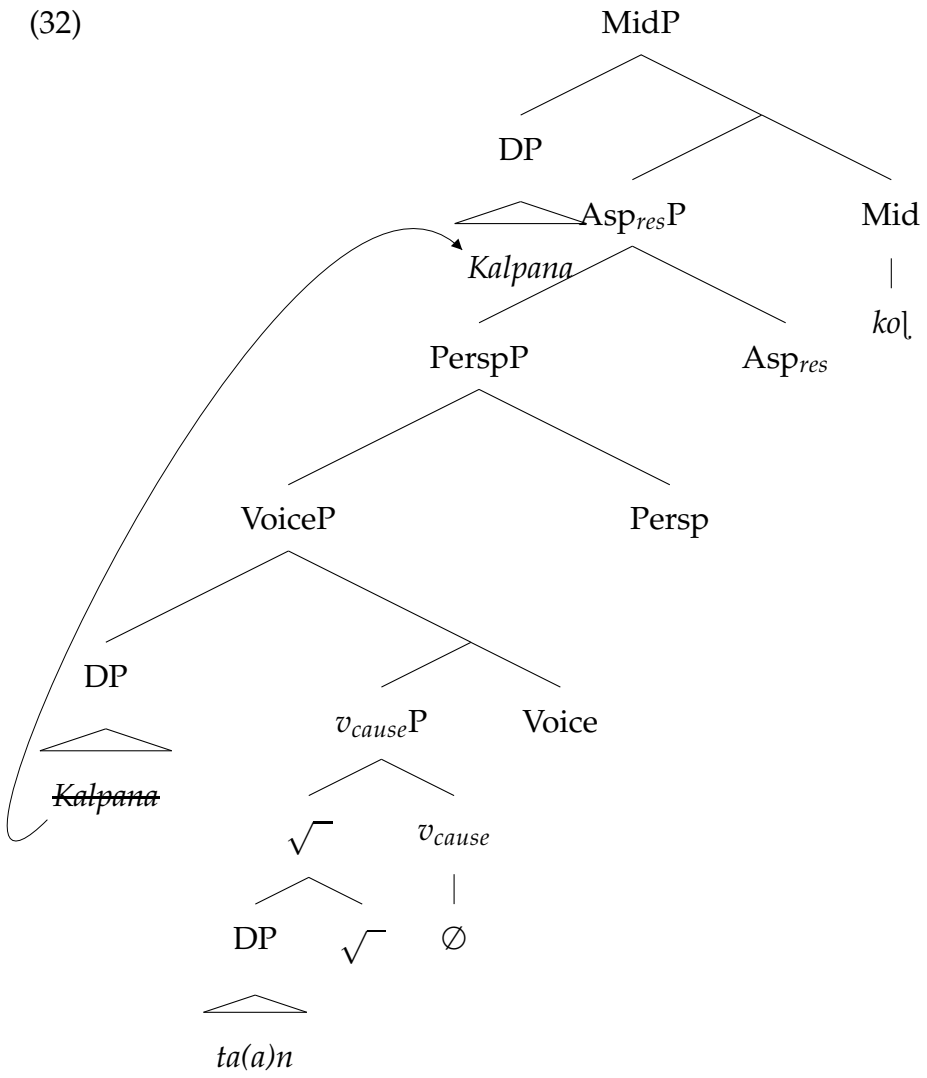
5 Back to the beginning: reflexives and *koɭ*

The discussion so far has established that *koɭ* 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 *koɭ* is required for reflexive anaphora in the standard case, i.e. with non-psych predicates.

Consider again a *koɭ*-reflexive like that in (3), repeated below which, given what we've argued, must have the structure given in (32):

(31) Kalpana$_i$ tann-æ$_{\{i,*j\}}$ kiɭɭi-ko-ɳɖ-aaɭ.
Kalpana.NOM ANAPH-ACC.SG pinch-*koɭ*-PST-3FSG
"Kalpana$_i$ pinched herself$_{\{i,*j\}}$."

(32)



The matrix subject *Kalpana* is externally merged in Spec, VoiceP where it is assigned an AGENT θ-role. It is then thematically raised up to the Spec, MidP where it is assigned an additional Affectee θ-role by Mid, identifying it as the affected argument of the result state of the main event in the scope of Mid. As a result of this, *Kalpana* which had earlier been properly contained inside the minimal PerspP containing the anaphor now bears scope outside this PerspP which now contains the anaphor and a copy of itself (in Spec, VoiceP). This enables it to join the set of nominals — in a higher clause if (18) itself is embedded under another clause as in (5) above, or in the salient discourse — which may denote perspective-holders with respect to the PerspP containing the anaphor. Since all types of anaphora in Tamil, including reflexive anaphora, are perspective-driven, this

then also allows *Kalpana* to qualify as a potential antecedent for *ta(a)n*. When *Kalpana* is the only salient antecedent available, as in (18), 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*:

(33) Siva$_i$ [$_{CP}$ Kalpana$_i$ tann-æ$_{\{i,j\}}$ kiḷḷi-ko-ṇḍ-aaḷ-ŭnnŭ] nene-tt-aan.
Siva Kalpana ANAPH-ACC.SG pinch-PST-3FSG-COMP think-PST-3MSG
"Siva$_i$ thought that Kalpana$_j$ pinched him$_i$/herself$_j$."

Recall that while *Kalpana* itself was part of the minimal PerspP containing the anaphor, it could not denote such a perspective-holder because of the well-formedness condition on perspective-holding that stipulates against this, and the fact that such a situation would yield a violation of Conditions B or C. This is indeed the configuration that the *koḷ*-less counterpart of (18) has throughout its derivation. This is also why the co-argument of the anaphor cannot antecede it without the help of *koḷ*.

Finally, to complete the paradigm, let us consider how other types of perspectival anaphora in Tamil are able to obtain in the absence of *koḷ*. 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 perspective-holder, assuming independent thematic and discourse constraints on this are satisfied,[10] thereby qualifying as a potential antecedent for the anaphor.

We have thus explained the core *koḷ* patterns in reflexives and non-reflexive anaphoric

[10]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.

structures in Tamil that we started this paper with. It is important to note, in this context, that *ko*ɭ'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*ɭ spells out. There is no *direct* connection between *ko*ɭ and reflexivity: while (non-psych predicate) reflexives must occur with *ko*ɭ, *ko*ɭ can freely occur with non-reflexive transitives, unaccusatives and unergatives. In this sense, it is also misleading to classify *ko*ɭ as a reflexive marker.

5.1 *ko*ɭ and psych reflexives

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

(34) Kalpana-vŭkkŭ$_i$ tann-æ$_{\{i,*j\}}$ piɖikkæ-læ/*piɖittŭ-kkoɭɭæ-læ.
Kalpana-DAT ANAPH-ACC.SG like-NEG/*like-*ko*ɭ-NEG
"Kalpana$_i$ didn't like herself$_{\{i,*j\}}$."

(35) Abinaya$_i$ tann-æ$_{\{i,*j\}}$ virŭmbŭ-gir-aaɭ/*virumbi-*ko*ɭɭŭ-gir-aaɭ.
Abinaya.NOM ANAPH-ACC.SG love-PRS-3FSG/*love-*ko*ɭ-PRS-3FSG
"Abinaya$_i$ loves herself$_{\{i,*j\}}$."

There are two theoretical aspects to these empirical patterns. The first has to do with the fact that *ko*ɭ is incompatible with psych predicates altogether. We have already explained why this is the case, arguing that it follows from the idea that psych-predicates already subsume the mental affectedness reading that *ko*ɭ contributes, rendering the latter superfluous and thus, by considerations of grammatical economy, illicit in conjunction.

The second has to do with the availability of reflexive anaphora in the absence of *ko*ɭ. I.e. while we may have independently explained why *ko*ɭ is not allowed in these types of structures, we have not accounted for how reflexive anaphora seems to be pos-

sible despite its absence. Here, we must reason backwards. Reflexive anaphora in psych predications is 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 a psych verb selects a PerspP in its complement and, furthermore, that the EXPERIENCER argument of the 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 – e.g. Adger and Ramchand (2006) 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, and Gillian Ramchand. 2006. Psych nouns and predication. In *Proceedings of NELS*, volume 36.

Amritavalli, R., and K.A. Jayaseelan. 2005. Finiteness and negation in Dravidian. In *The Oxford Handbook of Comparative Syntax*, ed. Guglielmo Cinque and Richard S. Kayne,

178–220. Oxford: OUP.

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.

Bylinina, Lisa, Eric McCready, and Yasutada Sudo. 2014. The landscape of perspective shifting. Talk given at Pronouns in Embedded Contexts at the Syntax-Semantics Interface, Tübingen.

Bylinina, Lisa, and Yasutada Sudo. 2015. The semantics of perspective sensitivity. ESSLLI 2015 course lectures.

Charnavel, Isabelle. 2015. Apparent exemption from Condition A: a perspective-based theory. 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 and M. Everaert, Oxford Studies in Theoretical Linguistics, 137–158. Oxford: OUP.

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, and 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, and Luther Liu. 2001. Logophoricity, attitudes, and *ziji* at the interface. In

Long-distance reflexives, ed. Peter Cole, Gabriella Hermon, and James Huang, 141–195. New York: Academic 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, and Dominique Sportiche. 1989. Pronouns, logical variables, and logophoricity in Abe. *Linguistic Inquiry* 20:555–588.

Koster, Jan, and Eric Reuland, ed. 1991. *Long-distance anaphora*. Cambridge: CUP.

Kratzer, Angelika. 2000. Building statives. In *Proceedings of the 26th annual meeting of the Berkeley Linguistics Society*, 385–399.

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.

Lidz, Jeffrey. 2001. The argument structure of verbal reflexives. *Natural Language and Linguistic Theory* 19:311–353.

Lidz, Jeffrey. 2004. Causation and refexivity in Kannada. In *Clause structure in South Asian languages*. Springer.

Lidz, Jeffrey, and 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.

Lødrup, Helge. 2007. A new account of simple and complex reflexives. *Journal of comparative Germanic Linguistics* 10:183–201.

Manzini, Rita, and 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.

Nishigauchi, Taisuke. 2014. Reflexive binding: awareness and empathy from a syntactic point of view. *Journal of East Asian Linguistics* 23:157–206.

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 and 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, and 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, and 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.

Rooryck, Johan, and Guido vanden Wyngaerd. 2011. *Dissolving binding theory*. Oxford Studies in Theoretical Linguistics. Oxford: Oxford University 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 and 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 and 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, and Thomas McFadden. To Appear. The articulated *v* layer: evidence from Tamil. Submitted to a volume on the event domain.

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

Wurmbrand, Susanne. 2001. *Infinitives: restructuring and clause structure*. Berlin: Mouton de Gruyter.