A syntactic feature-calculus and double-access analysis for indexical-shift in Tamil

Sandhya Sundaresan, CASTL (Tromsø)/Stuttgart

Here I present new evidence of a "partial" indexical shift, as in the (1) from Tamil:

(1) $\operatorname{raman}_i [CP \operatorname{taan}_i \operatorname{poo.v.een}(*\operatorname{aan})-\operatorname{nnu}]$ so.nn.aan raman SE_i go.FUT.1SG(*3SG)-that say.PST.3MSG "Raman said [CP that he_i would go]"

The matrix subject in (1) is 3MSG; the matrix verb denotes a speech-report and agrees in ϕ -features with the matrix subject. The embedded clausal complement contains a subject which has traditionally been described as a 3SG SE-anaphor (Annamalai, 1999): it is obligatorily coreferent with the matrix subject and interpreted obligatorily de se. But the embedded verb which should agree with its clausemate subject surfaces not as 3MSG but with 1SG agreement. Crucially and tellingly, such mismatched verbal agreement only seems to appear under matrix speech-event denoting verbs like SAY; with all other clausal-complement taking verbs, we get the expected 3MSG on the embedded verb (2):

(2) $\operatorname{raman}_i [CP \operatorname{taan}_i \operatorname{poo.v.aan/(*een)-nnu}]$ kaandupidi.tt.aan raman_i SE $_i$ go.FUT.3SG(*1SG)-that find-out.PST.3MSG "Raman $_i$ found out [CP] that he $_i$ would go]"

Why is subject-verb agreement obligatorily absent in (1) but obligatorily present in (2)? Consider the Zazaki structure (3) below (Anand and Nevins, 2004):

(3) Heseni_j (mi_k-ra) va ke $\varepsilon z_{j/k}$ dewletia Hesen.OBL (I.OBL-TO said that I rich.be-PRES "Hesen said that {I am, Hesen is} rich."

The indexical pronoun εz in (3) can refer to the speaker as is standard. But, just like the 1sG embedded-verbal agreement in (1), it can also refer to the attitude-holder $H\varepsilon sen$). Also, the indexical shift in Zazaki (3), is induced only under the scope of a (language-specific) proper subset of intensional predicates (Schlenker, To appear) – just as with (1) vs. (2) above – suggesting that the embedded CP in (1) involves indexical shift. (4) confirms further that genuine indexical shift and not e.g. a quotative is involved. An NPI inside a quotative may not be licensed by an operator outside the quote – however, (4) is fully licit:

(4) raman taan_i yenda tappu.m senjeen-nnu ottukka.le raman SE which mistake.even made-that admit.NEG "Raman_i didn't admit that $he_{\{i,*j\}}$ made any mistake."

Nevertheless, there is one important difference between (1) and (3). The subject-verb person-feature mismatch in (1) obtains within the same embedded clause and not cross-clausally, as in (3). Problematically, the non-agreeing feature in (1) is on verbal agreement which, under standard assumptions for suject-verb agreement (Chomsky, 2001), is inherited from the subject and is not inherent. But the clausemate subject taan itself shows different person-features (3rd) from that on the verb (1st)! A promising solution to this dilemma is initially suggested by Anand (2006)'s proposal that Malayalam taan (featurally identical to Tamil taan) is itself underlyingly a 1st-person indexical because it yields obligatory de se readings. Tamil taan behaves exactly like its Malayalam counterpart with respect to this diagnostic, suggesting that it is also a 1st-person indexical (albeit, crucially, a shifted one). If this is correct, we could claim that the 1st-person agreement on the embedded verb in (1) is merely be due to standard Agree between embedded T and 1sG DP in [Spec, TP]. We could try to extend Anand's context-overwriting approach for the Tamil data using a parametrized context-shifting operator: $[OP_{auth}\alpha]^{c,i,g} = [\alpha]^{j,i,g}$, where $j = \langle Auth(i), Addr(c), Time(c), World(c) \rangle$. But there are

Table 1: Spell-Out rules in a Late Insertion model

	[1,sg]	\longleftrightarrow	-een
AGR	[3, masc, sg]	\longleftrightarrow	-aan
PRONOUN	[1, sg]	\longleftrightarrow	naan
	[1, sg, -R]	\longleftrightarrow	taan
	[2, sg]	\longleftrightarrow	nii
	[3, masc, sg, +R]	\longleftrightarrow	avan
	[3, fem, sg, +R]	\longleftrightarrow	aval

two serious problems: 1. taan can only take 3rd-person antecedents. Such a restriction could be handled by claiming that context-shifting operators may only appear on embedding predicates marked 3rd person but, as Anand concedes, this is stipulative. 2. to account for "regular" subject-verb agreement in (2), Anand's analysis would have to claim that taan is not an indexical but a logophor in such cases (inheriting its antecedent's ϕ -features and transmitting these to the embedded verb (Kratzer, 2009)). However, taan in (2) is also interpreted obligatorily de se which, under Anand's analysis, automatically means that it is also a 1st-person indexical – bringing us back to the original problem. **Solution:** The embedded CP in (1)/(2) represents an eventuality that is simultaneously 1st-person relative to the matrix subject, but 3rd-person relative to the utterance-context speaker. Thus, I propose that indexical shift on taan is not due to context-overwriting but due to simultaneous access to embedding and utterance contexts in the embedded cartographic C-layer (an idea used for deriving Double Access Readings for tense (Giorgi, 2010)). Specifically, in (2), both utterance and embedding contexts are present in the embedded C-layer, but in (1), only the latter is. Support for the idea that the embedded C-layer in (1) is smaller than that in (2) comes from the fact that the embedded CP in (1) can be replaced by a gerundival whereas that in (2) cannot (as easily). **Result**: the $DP_{embedded}$ in (2) can be syntactically specified as both 1st (against Context $_{embedding}$: $\lambda c.Author(c)$) and 3rd person (relative to Context_{utterance}). But the DP_{embedded} in (1) can only be specified 1st-person because a 3rdperson feature would not be evaluable against Context_{utterance} as this is absent and would crash. Spell-Out rules in Table 1 (including a -R syntactic feature encoding referential anaphoricity (Reinhart and Reuland, 1993) to distinguish indexicals like taan from purely deictic ones like naan ('I')) use different underspecification patterns for $DP_{embedded}$ and $Agr/T_{embedded}$: thus, in (2) with [1,3], "3rd person" is inserted for Agr_{embedded} but taan is inserted for DP_{embedded}.

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