Modelling selectional variation for indexical shift

It is generally accepted that indexical shift (Schlenker, 2003; Anand, 2006; Shklovsky and Sudo, 2014) obtains exclusively under attitude predicates. Here, I show that: 1. there is considerable selectional variation wrt. which attitude predicates effect indexical shift 2. Such variation is not random but shows an implicational asymmetry privileging speech predicates. The major analyses of indexical shift (except for Deal, 2017) cannot handle such data. I will propose a way to syntactically constrain the selectional possibililities so as to yield the attested patterns.

Background: There are two main approaches to indexical shift: "monster-centric" (MC) (Anand and Nevins, 2004; Anand, 2006; Shklovsky and Sudo, 2014) vs. "pronoun-centric" (PC) (Schlenker, 1999, 2003, et seq.). These differ wrt: (i) the locus of variation for indexical shift; (ii) the nature of the shifter or "monster" (👻). Under MC, indexical shift obtains due to overwriting by contextual operators (the 👻) introduced by attitude verbs, which replace the utterance-context (default) with the intensional index associated with the attitude verb ($[\![👻\ \alpha]\!]^{c,i,g} = [\![\alpha]\!]^{i,i,g}$). All indexicals are assumed to be capable of shifting, but attitude verbs vary in their ability to introduce a 👻. In PC, the attitude verb is a quantifier (not an operator) that binds context-variables in its scope: i.e. it is itself a 👻. Thus, all attitude verbs are 👻s: there is no room for (selectional) variation here. The locus of variation lies in the shiftability of individual indexicals, which are associated with context variables. The conditions on the binding of these variables are lexically specified on the indexicals themselves, yielding optional shift (Amharic 'I') vs. obligatory shift (Slave 'I'), vs. obligatory non-shift (English 'I').

Data: I will report data from three sources. (I) Primary data from my native dialect of Tamil; (II) Primary data based on personal fieldwork on Tamil dialects; (III) Secondary data involving crosslinguistic patterns of indexical shift. (I): Indexical shift, reflected on the 1st-person agreement on the embedded verb (*ɕejčč.een*, 'won.1SG') shows a gradation in acceptability in my dialect: it is fully grammatical under 'say', less so under 'think' and least so (to the point of being ungrammatical) under 'discover':

(1) SELECTION UNDER 'SAY'/'THINK'/'DISCOVER':
Seetha$_i$ [$_{CP}$ taan$_{\{i,*j\}}$ poo**ʈʈ**i-læ **ɕej-čč-een**-nnŭ]
Seetha ANAPH.NOM.SG contest-LOC win-PRS-1SG-COMP
sonnaaɭ/?neneččaaɭ/*kaɳɖŭpiɖiččaaɭ.
said/?thought/*discovered
"Seetha$_i$ said/?thought/*discovered [$_{CP}$ that she$_{\{i,*j\}}$ had won the contest]." (Literal)

(II): fieldwork data (dialects: Hebbar Iyengar, Kongu Tamil, Palakkad Tamil, Madras Bashai) from 12 native speakers in Tamil Nadu, India, corroborated these same results. Indexical shift is clearly easier under 'say' than under 'think' or a perception verb like 'discover' (or 'hear'). (III) Crosslinguistic patterns of indexical shift, taken from 26 languages (from 19 distinct language families) support this result as well. The implicational asymmetry in (2) thus emerges:

(2) For a given grammar (language/dialect), if indexical shift is effected in the scope of a non-speech attitude predicate, it must also be effected in the scope of a speech predicate.

Being selectional, MC can deal with selectional variation for indexical shift. Simply put, attitude verbs that select a 👻 allow indexical shift; those that don't, cannot do so. That said, this approach has nothing insightful to say about which class of attitude predicates would be more or less likely to effect shift, thus cannot deal with the implicational asymmetry in (2). PC fares even worse, being non-selectional. Attitude verbs don't select 👻s, they are 👻s. As such, variation within the domain of attitude verbs is simply not predicted.

Proposal: I. Indexical shift is an embedded root phenomenon: Speech predicates actually have a privileged status among attitude predicates for a number of empirical phenomena

(so called "root phenomena"), also found in embedded clauses ("embedded root phenomena Hooper and Thompson, 1973) — e.g. anaphoric (Culy, 1994) and evidential (Speas, 2004) licensing, root transformation possibilities (Hooper and Thompson, 1973; Wiklund, Bentzen, Hrafnbjargarson, and Hróarsdóttir, 2009) and the relative ordering of adverbs and affixes (Cinque, 1999). Indexical shift is just another such phenomenon.

II. Descriptive entailment = structural entailment: Cinque (1999) argues for a designated clausal position for adverbs & functional heads corresponding to the syntactico-semantic types of predicate they modify (also Cristofaro, 2005): SPEECH ACT ≫ EVALUATIVE ≫ EVIDENTIAL ≫ EPISTEMOLOGICAL ≫ .... Speas (2004) proposes that different classes of propositional predicate select complements of differing sizes along this hierarchy, using this to explain the availability of selectional variation in evidential marking & logophora in embedded clauses.

III. 👻 is syntactically encoded in C: Indexical shift never obtains in finite clauses, typically never in nominalizations (under the same verbs) (Shklovsky and Sudo, 2014, for Turkish, Gültekin Şener and Şener, 2011 for Turkish, Podobryaev, 2014 for Mishar Tatar, Wurmbrand, 2017 for Buryat). Crucially, the possibility of indexical shift correlates with certain clausal structural opacity effects (e.g. tense mismatches, embedded negation, embedded nominative subject); its impossibility, with clausal transparency effects (e.g. long passivization, long-distance NPI licensing) (Wurmbrand, 2017, for Buryat, 6, Exx. 23-25). Strikingly, the one attested case of indexical shift in a nominalization is in Balkar (Koval, 2014): but focalization, scrambling and CP coordination tests show that this is categorially a CP.

I combine the insights in I-III as in (3):

(3) **Modelling selectional variation for indexical shift:**

(i) Indexical shift only under a speech predicate:
$[_{SpeechActP}\ [_{SpeechAct}\ 👻]\ [_{EvalP}\ [_{EvidP}\ [_{EpistP}\ \ldots [_{TP}\ \ldots]]]]]$

(ii) Indexical shift under a thought predicate:
$[_{SpActP}\ [_{EvalP}\ [_{Eval}\ 👻]\ [_{EvidP}\ [_{EpistP}\ \ldots [_{TP}\ \ldots]]]]]$

(iii) Indexical shift under an evidential predicate:
$[_{SpActP}\ [_{EvalP}\ [_{EvidP}\ [_{Evid}\ 👻]\ [_{EpistP}\ \ldots [_{TP}\ \ldots]]]]]$

(iv) Indexical shift under all attitude verbs:
$[_{SpActP}\ [_{EvalP}\ [_{EvidP}\ [_{EvalP}\ [_{EvidP}\ [_{EpistP}\ [_{Epist}\ 👻]\ \ldots [_{TP}\ \ldots]]]]]]]$

(3) formally captures (2) and explains why indexical shift doesn't obtain in non-CP nominalizations. Predictions: 1. Given strict monotonicity in complement-size, there should be an implicational relation between all predicate classes wrt. indexical shift. 2. The maximum left-peripheral space above 👻 is available in the clausal complement of a speech predicate in a language where the 👻 is merged on the lowest C head (Epist): e.g. Uyghur, Turkish or Buryat where indexical shift is allowed under all classes of attitude predicate. This is thus where we should find the greatest possibility for the absence of shift, despite the presence of a 👻 — i.e. what looks like a *Shift Together* exception (Anand and Nevins, 2004). While not conclusive, it is nevertheless suggestive that the Uyghur & Turkish examples in Shklovsky and Sudo (2014); Gültekin Şener and Şener (2011) all involve precisely such an environment. 3. Conversely, in e.g. Zazaki/Amharic, where indexical shift obtains only under a speech predicate, the 👻 is introduced in SpeechAct and the left peripheral space above it is rather limited — so we expect fewer (or perhaps no) instances of "unshift" in the clausal complement above 👻.

Finally, the 👻 in (3) is most easily construed as the operator in MC; but it could plausibly be a quantifier, as in PC, if we can find a way to have the attitude verb select the 👻 (instead of being it), e.g. by moving the (intensional) quantificational action from the attitude verb to one of the (Cinque-an) C heads it selects (Kratzer, 2006, 2012; Moulton, 2007, 2009).