Perspective sensitive items (PSIs) affected by Indexical Shift: *Indexical PSIs* in Turkish

The link between indexical shift and perspective shift is not well-understood (e.g. Bylinina & Sudo 2015). In indexical shift, indexicals (e.g. *I, now, here*) are interpreted inside the reported context, not the actual speech context. In perspective shift, perspective sensitive items (PSIs) are interpreted from the viewpoint of an individual other than the speaker. Prior work suggests these phenomena could potentially be unified in a general model of attitude shift (e.g. Sundaresan 2020).

Preview: We investigate how PSIs (e.g. motion verbs, evidentials, modals, epithets) are interpreted in Turkish attitude reports, where indexical shift is optional, and test if indexical shift affects PSI interpretation. This is the first systematic comparison of indexical shift and PSI types. We show **PSIs do not pattern uniformly** (Table 1): Some PSIs, what we call *Indexical PSIs*, are indexical-like in that they shift together with 1st person indexicals: Indexical PSIs (e.g. *gel* 'to come,' evidentials) must have shifted interpretations when indexical shift occurs, but cannot have shifted interpretations in the absence of indexical shift – suggesting these PSIs are interpreted relative to the indexical coordinates of the context. But other PSIs (e.g. relative socio-cultural expressions, epithets) are *un*affected by indexical shift. For Turkish, this argues against a unification of indexical shift and perspective shift.

Table 1. Shifting behavior of PSI types

PSI Type	w/ unshifted indexical	w/ shifted indexical	shift together
gel 'to come'	no shift	must shift	YES
Evidential markers	no shift	must shift	YES
Epistemic modals	must shift	must shift	*NO*
Epithets	no shift	no shift	*NO*
PPTs (e.g. *fun, tasty*)	must shift	must shift	*NO*
Socio-cultural expr.	can shift	can shift	*NO*

Some PSIs shift together with indexicals. We show that indexical shift not only targets indexicals but also some PSIs like the motion verb *gel* 'to come' and evidential markers. As illustrated in examples like (1), these PSIs *must* have shifted interpretations when indexical shift takes place, and *cannot* have shifted interpretations when indexical shift does not occur. (The same pattern holds with *wh*-questions: these are indeed indexical shift, not quotation, e.g. Akkuş 2019).

Let's look at (1) in detail. *Come* describes movement towards the perspective holder (or addressee, via listener-anchoring) (e.g. Nakazawa 1990): 'John wants to come to Boston' implies the speaker (or addressee) is in Boston. Ex. (1) features a 1st person indexical embedded subject, and the PSI *gel* 'to come' as the embedded verb. If these 2 elements can shift independently, (1) should be four-way ambiguous. But crucially, (1) only has two available interpretations:

(1) *Uttered in Los Angeles* (subscripts show who is in Boston, implied by *gel* 'to come'):

Ev arkadaş-ım (***ben***) Boston-a ***gel***-eyim ist-iyor.

House mate-POSS.1SG 1SG.NOM Boston-DAT come-SUBJ.1SG want-PROG

a. 'My roommate want that **I** come to Boston{#SPEAKER/ADDRESSEE}.' (neither shifts)

b. # 'My roommate$_1$ wants that **she$_1$** goes to Boston$_{ROOMMATE}$.' (both shift)

c. * 'My roommate wants that **I** go to Boston$_{ROOMMATE}$.' (only *gel* shifts)

d. * 'My roommate$_1$ wants that **she$_1$** comes to Boston{#SPEAKER/ADDRESSEE}.' (only *ben* shifts)

Without indexical shift (1a), the PSI is also not shifted: *gel* 'come' is anchored to the speaker or (more naturally) to the addressee. *With* indexical shift (1b), the PSI also shifts: *gel* 'come' is anchored to the attitude-holder *roommate*, leading to an odd reading (X wants to move towards where X is.) Crucially, readings where only one item shifts are not grammatical (1c,d). This suggests the PSI *gel* is sensitive to the *author* coordinate of the context, like *ben* 'I', which forces *gel* to shift with *ben*, leading to shift-together. Evidential *-mIş* (not shown) shows the same pattern.

Some PSIs are insensitive to indexical shift. (2) shows that relative **s**ocio-**c**ultural expressions

(SCEs) are not affected by indexical shift. Assume (2) is said in Turkey and Haruto is in Japan. Here, the SCE *yerel* 'local' can optionally be shifted *regardless* of indexical shift.

(2) Haruto (**ben**) **yerel** bir gazete-ye röportaj ver-di-m san-ıyor.
Haruto 1SG.NOM local a journal-DAT interview give-PST-1SG think-PROG
"Haruto thinks that **I**{SPEAKER/HARUTO} gave an interview to a **local**[TURKISH/JAPANESE] journal."

Thus, unlike indexical PSIs, SCEs like *yerel* 'local' are *not* affected by indexical shift. Our testing shows PSIs fall into two classes based on shift-together behavior with indexicals (see Table 1).

Proposal. First, for the class of PSIs that is sensitive to indexical shift, *indexical PSIs*, we argue that their semantic definitions that refer to the *author* parameter of the context. We propose the rough definitions in (3) for the verb *gel* 'to come' and the evidential marker *-mIş*.

(3) a. **gel** ⇝ an event of movement towards the *author* or *addressee*.
b. ***-mIş*** ⇝ the *author* lacks direct evidence for reported proposition.

Definitions like (3) allow us to capture the shifting (and shift-together) facts using context-shifting accounts of indexical shift (e.g. Anand & Nevins 2004; Deal 2020). Thus, following prior work on Turkish (e.g. Özyıldız et al 2018; Oğuz et al 2020), we suggest that a context shifting operator OP_{AUTHOR} (see Deal 2020) can merge into the periphery of finite embedded CPs.

Second, for PSIs *in*sensitive to indexical shift (SCEs, ex.2), we follow traditional accounts (e.g. Lasersohn 2005) and suggest that they are interpreted relative to a non-indexical context coordinate *judge* (*j*), under whose perspective such elements are interpreted. Since indexical shift does not change the value of *j*, these PSIs are *un*affected by indexical shift.

Indexical shift and verb agreement. Indexical PSIs provide a diagnostic for explaining seemingly puzzling verb agreement in Accusative Subject Constructions (ASCs). (4a) has agreement with accusative *ben-i*; (4b) lacks it. Crucially, indexical shift correlates with agreement:

(4) a. Burak ben-i Boston-a ***gel***-di-m san-ıyor.
Burak 1SG-ACC Boston-DAT come-PAST-1SG think-PROG
"Burak thinks that I came to Boston{#SPEAKER/ADDRESSEE}."
b. Burak ben-i Boston-a ***gel***-di-∅ san-ıyor.
Burak 1SG-ACC Boston-DAT come-PAST think-PROG
"Burak thinks that I *went* to Boston*BURAK*."

The interpretation of *gel* changes depending on embedded verb agreement in (4). **With agreement** (4a), *gel* is anchored to the speaker/addressee: the speaker/addressee is in Boston.**Without agreement** (4b), *gel* is shifted, anchored to the attitude-holder: Burak is in Boston. If *gel* only shift when indexical shift takes place (as shown in ex. 1), this implies that indexical shift takes place in ASCs with no overt verb agreement (4b). Thus, optionality of embedded verb agreement in ASCs is not random, and indicates whether indexical shift occurs in the embedded CP.

Conclusions. We provide novel evidence for a dissociation between perspective-senstive items (PSIs) and indexical shift: Some PSIs (indexical PSIs, e.g. *gel* 'to come') shift together with indexicals, but other PSIs (e.g. SCEs) are unaffected by indexical shift. The existence of indexical PSIs suggests that elements not typically viewed as indexical can pattern like indexicals and may be targeted by the same kind of shifting operator. This supports context-overwriting approaches (e.g. Deal 2020) and is not directly predicted by approaches reducing indexical shift to syntactic agreement (e.g. Baker 2023). Also, the link between verb agreement and indexical shift in ASCs shows optionality of the agreement reflects a fundamental syntactic difference, namely the merge of the OP. If ECM embedded clauses lack structural size for the merge of the OP (e.g. Deal 2020), this implies that at least some ASCs are prolepsis structures, in line with Major (2021) on Uyghur.