What is Mood *about*?
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Investigating the environments where both subjunctive and indicative mood are allowed in Farsi, this paper argues for an analysis of mood in Farsi in terms of settledness (Mari & Portner, 2018). I further propose that that settledness arises from the contribution of a topic operator, which determines what the sentence is *about* and anchors the proposition to the context of utterance.

Data. Farsi distinguishes between hypothetical and factual conditionals through the choice of mood in the antecedent of O-marked conditionals. Subjunctive mood in the antecedent of conditionals implies that the antecedent is an open issue, as in (1). Conditionals whose antecedents are marked with the indicative present tense yield a factual interpretation and are only felicitous when the antecedent is presupposed by some (or all) participants in the context, as in (2)-(3). [I mark subjunctive forms with ∅ in glosses to indicate the lack of deictic tense (Ferreira 2017, a.o.).]

(1) agar sekke šir   {#**mi-y-ad**/   **be-y-ad**},   team-e abi mi-bar-∅-ad
    if   coin head IMPF-come.PRES-3SG/ IMPF-come-∅-3SG}, team-EZ blue IMPF-win-PRES-3SG
    If the coin comes up head, the blue team will win.

(2) *Speaker A: My friend Joe, whom you haven't met, is very smart.*   *Speaker B: Oh yeah?...*
    agar enqadr bahuš {**ast**/   #**baš-ad**}, čera puldar n-ist?
    if   so   smart be.**PRES**.3SG/ be.∅-3SG why rich   NEG-be.PRES.3SG
    If he's so smart, why isn't he rich?

(3) Agar do ta jang-e jahani   ettefagh   oftaade {**ast**/   #**baš-ad**}, jang-e
    if   two CL war-EZ worldwide occurrence fall.PP AUX.PRES.3SG/ AUX.∅-3SG war-EZ
    jahani-e   sevvom ham mi-tavan-∅-ad   ettefagh   be-oft-ad
    worldwide-EZ third   also IMPF-can-PRES-3SG occurrence IMPF-fall-∅-3SG
    If two world wars have happened, a third world war can also happen.

Think in Farsi can take subjunctive or indicative complements, sometimes within the same context:

(4) *Context: Ali receives a bouquet of flowers. There is no information about the sender.*
    Ali fekr   mi-kon-∅-ad   golha   ro maman-eš   ferest-ade {**baš-ad**/ **ast**}
    Ali thought IMPF-do-PRES-3SG flower-PL RA mother-their send-PP   be.∅-3SG/ be.PRES-3SG
    Ali thinks that his mom sent the flowers.

I make the novel observation that impossible beliefs can only be reported using the indicative mood in the complement, as evidenced by the infelicity of the subjunctive mood in examples (5) and (6).

(5) *Context: Sara has lost her memory and mistakenly believes she is Adele.*
    Sara fekr   mi-kon-ad   Adele {#**baš-ad**/ **ast**}
    Sara thought IMPF-do.PRES-3SG Adele be-∅-3SG/ be.PRES-3SG
    Sara thinks she is Adele.

(6) *Context: I have a meeting with Sara at 2. It's one o'clock now but she is calling me on zoom.*
    Sara fekr   mi-kon-ad   alan sa'at do {#**baš-ad**/ **ast**}
    Sara thought IMPF-do.PRES-3SG now clock two be-∅-3SG/ be.PRES-3SG
    Sara thinks it's two o'clock now.

Finally, while the possibility modal *šayad* in Farsi typically combines with a subjunctive verb (as in (7)), the indicative becomes felicitous when the proposition answers a *why*-question, as in (8).

(7) šayad Trump entaxabat ra {**be-bar-ad**/   #**mi-bar-ad**}
    maybe Trump election   RA IMPF-win-PRES-3SG/ IMPF-win-∅-3SG
    Trump may win the election.

(8) Speaker A: Why isn't Sara here?   Speaker B: I'm not sure. . . . .
    šayad mariz {**baš-ad**/   **ast**}
    maybe sick   be-∅-3SG/ be.PRES-3SG

Maybe she's sick.

Discussion. The Farsi data challenges comparison-based theories of mood, which take the subjunctive mark to the argument of a verb which is comparative or evaluative, concepts formally modeled with an ordering relation over worlds or propositions (Giorgi & Pianesi 1997; Villalta 2008; Portner 2018; Portner & Rubinstein 2020). It also poses a problem for truth-based theories, which associate the indicative with commitment, certainty, or related concepts (Farkas 1985; Quer 1998; 2001; Giannakidou 2009; 2011; Portner & Rubinstein 2013; Giannakidou & Mari 2021), as they struggle to explain why the indicative is required to report impossible beliefs. Building on Farkas (2003), Schlenker (2005), and Mari & Portner (2018), I argue that the indicative carries a *settledness* presupposition (defined in (9)), while the subjunctive lacks a presupposition but pragmatically implies that the proposition is *not settled* due to Maximize Presupposition (*MP*).

(9) A proposition p is **settled** relative to a context C if and only if either p is entailed in C or $\neg p$ is entailed in C: $(\forall w : w \in C \rightarrow w \in P) \vee (\forall w : w \in C \rightarrow w \in \neg P)$

Proposal. Following Portner (1992); Kratzer (2021); Schwarz (2009); McKenzie (2012), among others, I assume that **clauses with deictic tenses (i.e. indicatives)** contain an (Austinian) topic situation (Austin, 1950; Kratzer, 2021), which are the situations that the sentences are about (Lewis's *subject matter*). I follow Schwarz (2009) in assuming that the topic situation is introduced by a syntactically represented topic operator, as shown in (10).

(10)

$\langle s,t \rangle$

$\mathbf{s}_{topic}$ $\langle s,\langle s,t\rangle\rangle$

topic$_{\langle\langle s,t\rangle,\langle s,\langle s,t\rangle\rangle\rangle}$ $P_{\langle s,t\rangle}$ (Schwarz, 2009, p. 94)

Semantically, the topic operator anchors the proposition to the context of utterance by introducing the actual situation that the proposition is *about*.

(11) $[\![topic]\!] = \lambda P.\ \lambda s' : \underline{P \text{ is } \textbf{\textit{about}} \text{ } s'}.\ \lambda s.\ P(s) = 1$

The topic operator takes a proposition P and the topic situation, whose value always comes from the context of the utterance, as arguments and introduces an aboutness presupposition. In Lewis's term, the topic situation (his subject matter) induces partitions, which are ways of grouping worlds.

(12) A *subject matter m* is a relation on worlds; w is grouped with w' if they are just alike where m is concerned.   (Yablo, 2014)

A proposition is *about* a topic situation iff the truth value of that proposition supervenes on that situation (Lewis, 1988). In other words, a proposition P is about a topic situation s if each cell of a partition M induced by s either implies or contradicts P (Lewis, 1988). That is, the truth value of the proposition never varies in worlds that are similar with respect to the topic situation (i.e. worlds that contain a counterpart of the topic situation).

(13) P is **about** s iff $\forall w : w \in C\ \&\ w \in Counterpart(s_{topic}) \rightarrow (w \in P) \vee \forall w : w \in C\ \&\ w \in Counterpart(s_{topic}) \rightarrow (w \in \neg P)$

Note that the 'aboutness' contributed by the topic operator, projected in the syntax when the tense head is deictic, is equivalent to the *settledness* presupposition defined in **??**. Clauses with deictic tenses presuppose the existence of a contextually salient topic situation upon which the truth value of the proposition supervenes, i.e. the worlds in the context set with a counterpart of this topic situation either all verify or all falsify the proposition. The topic situation whose value rigidly depends on the context of utterance refers to a salient situation in the context, which can be the content of a salient proposition within the context (i.e. to the situation exemplifying that proposition). When such a topic situation is salient, the indicative is required by *MP*. The subjunctive, when used felicitously, implies that the presupposition of the stronger alternative is not satisfied,

i.e., the proposition is not settled.

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