The performativity of aspect: imperfective assertions in Marathi Ashwini Deo Yale University ashwini.deo@yale.edu

Introduction: It is a well-observed fact about English that both present progressive (1-a) and simple present declarative sentences (1-b) are felicitous with future time reference on the "planned" or "scheduled" reading (Prince 1973; Goodman 1973; Dowty 1977; Comrie 1985; Copley 2009).

(1) a. The Red Sox are playing/?defeating the Yankees next week. $PRES(PROG(\phi))$ b. The Red Sox play/?defeat the Yankees next week. $PRES(\phi)$

The difference in the futurate readings associated with the two constructions has been said to involve degree of certainty; i.e. for any future-oriented proposition ϕ , PRES(ϕ) implies a greater degree of certainty regarding the occurrence of ϕ than PRES(PROG(ϕ)) (Dowty 1977; Prince 1973).

In Marathi (Indo-Aryan), a language with both progressive and imperfective morphology, present imperfective sentences provide the translational equivalent of English simple present sentences, indicating some semantic similarity in their logical form. Moreover, comparable to English, both present progressive (2-a) and present imperfective (2-b) sentences exhibit futurate readings. However, Marathi futurates contrast with their English counterparts in a striking way: Rather than giving rise to a planned/scheduled reading with a greater degree of certainty as in English, PRES(IMPF(ϕ)) is felicitous on a futurate reading only if ϕ is **not** already scheduled, planned or otherwise determined in the pre-assertion context. To illustrate, in a context in which the move out of this house has already been decided upon by/for the speaker, she cannot use (2-b) to report it. Only (2-a) is appropriate in such a context. The use of (2-b) has a performative effect; its utterance changes the world by committing the speaker to act in accordance with the content of the future-oriented proposition, i.e. to ensure the coming about of the future situation it describes. (2-a), in contrast, can only be used reportatively: i.e. to report a pre-assertion commitment of the agent.

(2)	a.	Mi udyā he ghar	sod-toy	$ extsf{PRES}(extsf{PROG}(\phi))$
		I tomorrow this house-NOM leave-PROG.PRES.M.SG I am leaving this house tomorrow.		
				(it has already been decided)
	b.	Mi udyā he ghar	sod-to	$PRES(IMPF(\phi))$
		I tomorrow this house-NOM leave-IMPF.PRES.M.SG I will leave this house tomorrow.		
				(I am deciding as I speak)

Depending on context, $PRES(IMPF(\phi))$ utterances have a range of performative effects: they can be interpreted as taking on personal commitments, offers or promises, or as threats. The performative use of future-oriented $PRES(IMPF(\phi))$ sentences restricts their felicitous usage to first person subjects. There is no such restriction on present-oriented $PRES(IMPF(\phi))$ assertions, which give rise to habitual/generic and continuous readings. $PRES(PROG(\phi))$ sentences carry no person restrictions regardless of present or future orientation.

This paper offers an assertoric account of the performative effect associated with the use of imperfective marking in Marathi. The effect is analyzed as arising indirectly from imperfective assertions as a contextual inference rooted in the aspectual semantics and division of labor between the operators PROG and IMPF. The absence of the performativity effect in English is attributed to the absence of a morphologically overt PROG–IMPF distinction.

Analysis: Future-oriented present tense sentences have been taken to require the notion of a "preparatory planning stage", which holds at reference time. This notion is concretized here in the form of the PLAN operator (based closely on the framework presented in Condoravdi & Lauer

2009, 2011), which both PRES(PROG(ϕ)) and PRES(IMPF(ϕ)) assertions contain in their logical form. Let $Hist_t(w)$ stand for historical alternatives of w at (a final subinterval of) t and $Dox_t^a(w)$ stand for the doxastic alternatives of an agent a at world w and at (a final subinterval of) t. Let $<_w^a$ stand for a preference or likelihood based ranking on possible worlds relative to a. Then, given a predicate of eventualities (i.e.sentence radical) ϕ :

(3)
$$[\![PLAN(a)(\phi)]\!] = \lambda t \lambda w. \ \forall w' \in Dox_t^a(w) : \forall v, u \in Hist_t(w') : v \in \phi \land u \notin \phi \to v <_w^a u$$

That is, ϕ is planned according to a in w at t iff in every w' compatible with a's beliefs at t in w, every world among w''s historical alternatives in which a ensures that ϕ , is ranked higher than any world in which a does not ensure that ϕ . Note that a is not always identified with the speaker or the subject referent; examples like *The plane leaves at 4 PM* (Kaufmann 2005) and *The Rosenbergs die tomorrow* (Dowty 1977), are naturally interpreted as reporting the commitments of agents other than the speaker or the subject. PROG and IMPF, when they give rise to future reference, do not combine directly with predicates of eventualities ϕ but with <u>PLAN^a ϕ predicates</u> of the type in (3), i.e. *ist*, and yield world-time predicates which are instantiated at **now** by PRES (4).

(4) PRES:
$$\lambda P_{ist} \lambda w. P(\mathbf{now})(w)$$

The contribution of PROG and IMPF is as in (5) and (6), with COIN defined in (7). This is a simplified variant of the proposal in Deo (2009) characterizing the PROG–IMPF contrast that factors out the meaning component necessitated for deriving habitual/generic readings.

(5) **PROG:**
$$\lambda P_{ist} \lambda t \lambda w$$
. COIN (P, t, w)

(6) IMPF:
$$\lambda P_{ist}\lambda t\lambda w$$
. $\exists t'[t \subseteq_{ini} t' \land \text{COIN}(P, t', w)$

(7)
$$\operatorname{COIN}(P, t, w) = \begin{cases} \exists e [P(w)(e) \land t \subset \tau(e)] & \text{if } P \subseteq \mathcal{E}^E \text{ or } P \subseteq \mathcal{E}^S \\ P(t)(w) & \text{otherwise} \end{cases}$$

The logical form of PRES(PROG(PLAN^{*a*} ϕ)) and PRES(IMPF(PLAN^{*a*} ϕ)) assertions will be as in (8) and (9). A progressive future-oriented assertion is true at a world *w* iff some agent *a*'s beliefs at utterance time commit her to rank (and ensure) future ϕ -worlds over $\neg \phi$ worlds among otherwise equivalent alternatives. In contrast, an imperfective future-oriented assertion is true at *w* iff *a*'s beliefs at some superinterval continuing the utterance interval, lead to the same commitment.

(8)
$$\lambda w. \forall w' \in Dox^a_{now}(w) : \forall v, u \in Hist_{now}(w') : v \in \phi \land u \notin \phi \to v <^a_w u$$

(9)
$$\lambda w. \exists t' [\mathbf{now} \subseteq_{ini} t' \land \forall w' \in Dox^a_{\mathbf{t}'}(w) : \forall v, u \in Hist_{t'}(w') : v \in \phi \land u \notin \phi \to v <^a_w u]$$

The performative effect in Marathi comes about as a result of this subtle but clear distinction between PROG and IMPF assertions. Informally, if PLAN^{*a*} ϕ holds **now** in *w*, i.e. if *a* is already committed to ensuring the truth of ϕ at utterance time, then by the quantity maxim, the PROG assertion, being stronger, is the preferred grammatical means for communicating this fact. The IMPF assertion conventionally conveys that *a* is committed to ensuring the truth of ϕ at some superinterval of **now** in *w* but conversationally implicates by the pragmatic blocking principle that this commitment is not already in effect at **now** [since if it had been, then the speaker would have used the stronger PROG form]. The resulting inference is that the commitment doesn't exist at utterance time but *comes into being* after the utterance time. This gives rise to the performative effect of the IMPF assertion, which must be interpreted as changing the world by adding a new fact – the undertaking of a commitment to ensure that ϕ . In most contexts, the speaker can only undertake a commitment to ensure that ϕ if she has control over ϕ – hence the restriction to first person subjects (modulo contextual exceptions, which will be discussed in the talk).

Finally, English fails to exhibit the performativity effect precisely because it does not morphologically realize IMPF. In English future-oriented present tense sentences, PRES (4) directly combines with $PLAN^a \phi$ predicates, which result is logically indistinguishable from $PRES(PROG(PLAN^a \phi))$ sentences on this analysis. The division of labor and pragmatic blocking that characterizes Marathi PROG-IMPF relations is absent here and so is the emergent performativity effect.