Rising Imperatives

Deniz Rudin (drudin@ucsc.edu)—University of California, Santa Cruz

Acknowledgments: This work was supported by the Humanities Institute at UC Santa Cruz. Thanks to Pranav Anand, Adrian Brasoveanu, Cleo Condoravdi, Amy Rose Deal, Ashwini Deo, Donka Farkas, Sunwoo Jeong, Magda Kaufmann, Manfred Krifka, Dan Lassiter, Sven Lauer, Jim McCloskey, Jessica Rett, Floris Roelofsen, Matthijs Westera, and audiences at Stanford, Irvine, Berkeley, and USC for helpful discussion, and to Jérémie Beauchamp, Itamar Francez and Erlinde Meertens for letting me record their pitch excursions. All errors are my own.

The Data

Strength of Endorsement:

(1) **A:** I love this present grandma gave me.
B: Write her a thank-you note?

(2) **A:** [I'm tired, what should I do?]
B: Lech lishon kzat?
go.IMP to.sleep little
'Take a nap?'

(3) [A 12-year-old talking to her mother:]
Achète-moi une crème glacée?
buy-me a cream iced
'Buy me an ice cream?'

▷ With falls: Orders/instructions/demands

▷ With rises: Suggestions/nudges/pleas (q.v. Portner 2015)

Obviation of Contradiction:

(4) **A:** I don't know what my plans should be this evening, do you have any advice?
B: Work on your paper? Blow it off and go to the beach?

(5) [Addressee is too sleepy to get work done.]
Doe een dutje? Ga naar huis?
do.IMP a nap go.IMP to home
'Take a nap? Go home?'

▷ With falls: #

▷ With rises: Perfectly fine

Proposal

Speaking broadly: Rising intonation *modulates speaker commitment*. Specifically:

▷ Rising intonation *calls off* speaker commitment (Truckenbrodt 2006)

▷ The Table model (Farkas & Bruce 2010) gives us a framework for understanding that effect (Rudin 2017)

What's at stake: Intonation helps legislate division of labor between denotation, commitment and update for imperatives (q.v. von Fintel & Iatridou 2017).

Problems for Prior Accounts

Kaufmann (2012, 2016)
Imperatives are performative uses of strong deontic modals (*go to the store* ≈ *I hereby decree that you must go to the store*).

(6) You must work on your paper? You must blow it off and go to the beach?

(6) ≠ (4)

Condoravdi & Lauer (2012, 2017)
Imperatives are speaker preferential attitudes (*go to the store* ≈ *I want you to go to the store*).

(7) I want you to work on your paper? I want you to blow it off and go to the beach?

(7) ≠ (4)

Portner (2015)
Falling imperatives update the speaker's copy of the addressee's to-do list (≈ *I want you to do this*); rising imperatives update the addressee's copy (≈ *I think you want to do this*).

▷ Problem: doesn't predict the asymmetry in (4). An incoherent update sequence is bad no matter which to-do list is being updated.

Preliminaries

The Table model relies on a tripartite division of utterance meaning into (i) denotation (ii) commitment, and (iii) proposed update. There is no concrete prior proposal for such a division of imperative meaning.

Slicing Up Imperatives

Proposed division of imperative meaning:

I. An imperative denotes a simple, unmodalized proposition p of the form *addressee does VP* (cf. Portner 2004, von Fintel & Iatridou 2017)

II. An imperative commits the speaker to an effective preference for p (cf. Condoravdi & Lauer 2012, 2017)

III. An imperative projects a conversational future in which all interlocutors have agreed to an effective preference for p (cf. Starr 2017)

See handout for formal details of the proposal.

The Model

Relevant components:

- Public Effective Preferences (PEPs): a set of propositions an agent has publicly committed to an action-guiding preference for
- Common Preferences (CP): a set of propositions that all interlocutors have committed to having an action-guiding preference for
- The Table (T): a stack of denotations, the uppermost of which is currently at-issue
- The Projected Set (PS): a set of conversational states that could result from the content of the Table being incorporated into the context

Uttering an Imperative

(8) a. **A** says *go to the store* to **B** (p is the proposition *B goes to the store*)

b.

PEP_A	Table	PEP_B
p	p	

$PS = \{CP + p\}$

A's utterance has three effects:

i. **A** commits to an effective preference for **B** to go to the store

ii. **B** going to the store becomes at issue

iii. A conversational future in which for **B** to go to the store is a common preference is projected

Rising Intonation

Rising intonation calls off speaker commitment:

(9) For any utterance accompanied by L* H-H%, the speaker's commitments pre- and post-utterance are identical

(10) a. **A** says *go to the store?* to **B**

b.

PEP_A	Table	PEP_B
	p	

$PS = \{CP + p\}$

▷ **A** still makes **B** going to the store at issue

▷ A possible conversational future in which that has become a common preference is still projected

▷ But **A** stops short of committing to having that preference herself

Accounting for the Facts

In uttering a rising imperative, a speaker:

i. Proffers a course of action, but

ii. Does not commit to a preference that that course of action actually be taken

Strength of Endorsement
Rising imperatives are weak because the speaker does not commit to a preference.

▷ Weak endorsement is pragmatic:

▷ Why would the speaker proffer a course of action if they don't think it's relevant and at least somewhat sensible?

Obviation of Contradiction
Speaker hasn't committed to preferring either incompatible course of action, only put both of them forward as options: no contradiction.

▷ With falls: speaker incurs mutually incompatible preferential commitments

Upshot

Prior proposals (Truckenbrodt, Rudin) argue that rising intonation operates on only one portion of utterance meaning: speaker commitment. Extending this idea to imperatives helps legislate the division of labor between denotation, commitment, and update in their discourse effect.

▷ Proposal gets around problem for Condoravdi & Lauer by taking speaker preference to be only one component of imperative meaning

▷ Comparable proposal with to-do lists instead of PEPs might be feasible

▷ Problem for Kaufmann is stickier, provided that imperatives are treated as *strong* modals

The Table model is a particularly natural fit for a commitment-based account of rising intonation; other models may be able to capture the same effect.

References: Condoravdi, C. & S. Lauer. 2012. Imperatives/2017. Conditional imperatives and endorsement. Farkas, D. & K. Bruce. On reacting to assertions and polar questions. von Fintel, K. & S. Iatridou. 2017. A modest proposal for the meaning of imperatives. Kaufmann, M. 2012. Interpreting imperatives/2016. Fine-tuning natural language imperatives. Portner, P. 2004. The semantics of imperatives within a theory of clause types/2015. Commitment to priorities. Rudin, D. 2017. Declarative sentences and the L* H-H% tune. Starr, W. 2017. A preference semantics for imperatives. Truckenbrodt, H. 2006. On the semantic motivation of verb movement to C in German.

Handout for Rising Imperatives SALT 2018

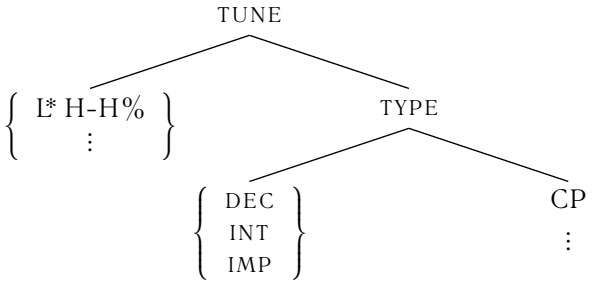
Deniz Rudin (drudin@ucsc.edu)

A context c^n is a tuple $\langle A_n, DC_n, PEP_n, T_n, CG_n, CP_n, PS_n \rangle$

Where A_n is a set of interlocutors, DC_n and PEP_n sets of discourse commitments $DC_{a,n}$ and public effective preferences $PEP_{a,n}$ for each $a \in A_n$, T_n a stack of sentential denotations, CG_n and CP_n sets of propositions, and PS_n a set of sets of propositions.

Sentential denotations are arguments to a function from contexts to contexts supplied by clause type markers; those functions can be modified by intonational tunes:

(1)



Imperatives commit the speaker to a preference for the sentence's denotation, Table that denotation, and project a conversational future in which it has become common preference. Let k be the type of a context.

(2) $[\![\text{IMP}]\!] =$

$$\lambda p_{st}.\lambda sp_e.\lambda c^n{}_k.\begin{bmatrix} PEP_{sp,n+1} & = & PEP_{sp,n} + p \\ CG_{n+1} & = & CG_n \\ CP_{n+1} & = & CP_n \\ T_{n+1} & = & T_n + p \\ PS_{n+1} & = & \{CP_{n+1} + p\} \\ \forall a \in A_{n+1}, DC_{a,n+1} & = & DC_{a,n} \\ \forall a \in (A_{n+1} - sp), PEP_{a,n+1} & = & PEP_{a,n} \end{bmatrix}^{c^{n+1}}$$

L* H-H% calls off speaker commitment. Let K be the type of a function from contexts to contexts (ekk).

(3) $[\![\text{L* H-H\%}]\!] =$

$$\lambda K_K.\lambda sp_e.\lambda c^n{}_k.\begin{bmatrix} DC_{sp,n+2} & = & DC_{sp,n} \\ PEP_{sp,n+2} & = & PEP_{sp,n} \\ CG_{n+2} & = & CG_{K(sp,c^n)} \\ CP_{n+2} & = & CP_{K(sp,c^n)} \\ T_{n+2} & = & T_{K(sp,c^n)} \\ PS_{n+2} & = & PS_{K(sp,c^n)} \\ \forall a \in (A_{n+2} - sp), DC_{a,n+2} & = & DC_{a,K(sp,c^n)} \\ \forall a \in (A_{n+2} - sp), PEP_{a,n+2} & = & PEP_{a,K(sp,c^n)} \end{bmatrix}^{c^{n+2}}$$

The context that results from utterances of sentences accompanied by L* H-H% is identical to the input context with respect to the speaker's DC and PEP, and is otherwise the same as the context that would've resulted without L* H-H%.

Making incompatible preferential commitments

When a speaker adds a proposition to their public effective preferences, they are presenting themselves as though that proposition is maximal with respect to their EFFECTIVE PREFERENCE STRUCTURE:

(4) EFFECTIVE PREFERENCES (cf. Condoravdi & Lauer 2016 ex. 65-67):
An agent A's EFFECTIVE PREFERENCE STRUCTURE (EP_A) is a pair $\langle \mathbf{P}, \prec \rangle$ that is consistent and realistic with respect to A's epistemic state,
where $\mathbf{P} \subseteq \wp(W)$ and $\prec$ is a strict partial order on $\mathbf{P}$

a. CONSISTENCY:
EP_A is CONSISTENT WITH A's epistemic state E_A iff for any $X \subseteq \mathbf{P}$, if $E_A \cap \bigcap X = \varnothing$, there are $p, q \in X$ such that $p \prec q$

b. REALISM:
EP_A is REALISTIC relative to A's epistemic state E_A iff for all $p \in \mathbf{P}$, $p \cap E_A \neq 0$

It follows from the requirement of CONSISTENCY that for any disjoint propositions p and q, p and q cannot both be maximal with respect to any effective preference structure. Therefore, if a speaker adds disjoint propositions p and q to their public effective preferences, there exists no effective preference structure compatible with the commitments they have made. This gives rise to a sense of contradiction.