Speech Acts:
Dynamic Force and Conversational Update
Lecture 4: Imperatives

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Spillover from last time: The Psychology of QUDs

If the CG tracks something like a common state of acceptance, then what does the QUD track?

One possibility: whatever collective attitudes support collaborative or joint decision making.

If we're on a walk together and we come to a crossroad, then we face a decision about which path to take. We can think of this in terms of mutual awareness of some set of options.

- What is having or considering a question?
- What is it to have an option?
- Are there genuinely inquisitive attitudes?
- If so, how can these attitudes become common / mutual?

Imperatives and BS

As a reminder, the context of a conversation c at a world w is the shared information state of c's interlocutors at w.

We model this as a set of worlds CS_w^c compatible with everything commonly assumed for the purposes of c in w (common ground).

Now here's a question: what kind of effect does an utterance of the sentence 'Feed the cat' have on CS_w^c?

Intuitively, the point of uttering such a sentence isn't to change what we assume for the purposes of c in w.

Imperatives and BS

Moreover, it is often noted that when we use imperatives we do not make truth-conditional contributions to a conversation, as suggested by the infelicity of uttering (1b) in response to (1a):

(1) a. Feed the cat!

b. # That's false.

This suggests that the semantics for imperative clauses is non-propositional, which undermines the idea that the essential dynamic effect of an imperative is some kind of intersection rule.

‘Uniform’ and ‘Split’ Contexts

Today we’ll discuss two options to account for the dynamic effects of imperative sentences:

- Split. Rather than target the set of things commonly assumed to be true, imperatives update a list of properties that represents the practical commitments of the addressee.
- Uniform. Imperative clauses do have a propositional semantics, but they can only be felicitously uttered in contexts where those propositions will be interpreted for action in a certain way.

Questions

Here are some other questions we'll consider today:

- How do imperative sentences get used?
- Do different uses produce different discourse effects?
- Are these effects 'built in' to the semantics or inferred?
- What kinds of inferences can we draw from imperatives?
- What kind of content do imperatives proffer?

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Imperative Speech Acts

Illocutionary Acts

Imperatives are used to perform a wide variety of illocutionary acts:

(2) Drop and give me 20! [command]

(3) Please feed the cat while I'm away. [request]

(4) Take the 1 train. [instruct]

(5) Try the blueberry bran muffin. [suggest]

(6) Have an almond. [invite]

(7) Don't come any closer! [warn]

(8) Please be home! [wish]

Refresher: Force

There are two important aspects to illocutionary force:

- Essential effect. The change to the state of play with which a speech act can be identified; that the act is essentially directed at bringing about. (Constitutive of force.)
- Enabling conditions. The background conditions that (rationally) enable this change to take place, e.g. by putting a demand on the addressee to accept the proposed change.

Illocutionary Force

Let's return to our 'traditional' assumption that illocutionary acts performed with imperative sentences can be decomposed into a sentence radical denoting the proposition the imperative is aimed at making true and an illocutionary force operator (!):

(9) Kiss my grits!

a. ! [*addressee kisses the speaker's grits*]

What is the default force associated with !? (i.e., what is the typical conversational move we make with imperatives?)

Default Force

In the imperatives literature, it is often claimed that commands are the canonical or central use of imperatives.

A command is a speech act that (a) obliges the addressee to make the prejacent of an imperative true where (b) the force of this obligation trades on the speaker's authority.

But in fact we rarely use imperatives to issue commands.

We can try to generalize this to cover (almost) every speech act we perform using imperatives, by noting that there's a very strong tendency for imperatives to be used as directives.

A directive is a speech act that (a) motivates (or otherwise positively changes the valence of) some future course of action where (b) the basis of this motivation is the speaker's 'endorsement'.

Directives

It's not always clear how to characterize directives, both w.r.t. the constraints they place on future behavior and the states of endorsement that serve as enabling conditions.

Regarding the former, directives have been claimed to target lots of different things:

- Preferences (Starr 2020);
- Planning intentions (Harris 2021);
- 'Hyperplans' (Charlow 2014);
- Commitments / obligations (Portner 2004);
- Heterogenous combination of above (Bach & Harnish 1979).

For some of these states, it's controversial whether they can be targeted directly or only indirectly via belief.[1]

[1] (cf. Egan & Sundell ms, Schiller ms, Schiller & Nichols ms).

Practical Imperatives

Regarding the enabling conditions, it is sometimes claimed that directives express bouletic attitudes.

But imperatives can be used in a way that is disinterested or even runs contrary to one's interests:

(10) a. How do I get to Harlem?

b. Take the A-train. (Kaufmann 2016)

(11) I'd rather you take the train with me, but yeah you're right flying would be faster, so do that.

(12) I really don't want you to leave, but... go.

On these grounds, Kaufmann (2016) distinguishes directives from what she calls practical imperatives.

Expressive Uses

Imperatives can also be used expressively.

(13) Scenario: *Sneaking back into your parents' house after a night out partying and hoping they won't notice.*
Please don't wake up!

Expressive readings are only available when either:

(a) The imperative prejacent describes a state of affairs fully determined prior to the time of utterance, or

(b) the addressee is merely imagined (Kaufmann 2016: 328).

Force Operators in LF

If we can identify a default force associated with the use of imperative sentences, should this force be built into the LF?

Some examples suggest that the answer is 'no':

(14) John$_i$ said eat his$_i$ dinner (Roberts 2023).

(15) My advice to you is: Keep together.
Either everybody stay or everybody leave! (Mastop 2005)

Desiderata

What is the full range of data that a theory of the essential dynamic effects of imperative clause types must account for?

There's way too much to go into in one session, but we'll look at the following:

- Intuitions about what imperatives convey;
- How imperatives embed in other constructions;
- The kinds of inferences imperatives license;
- The infelicities associated with imperatives.

Truth-values

Uses of imperatives can very often be given a truth-conditional paraphrase:

(16) Feed the cat!

a. You should feed the cat.

b. I instruct you to feed the cat.

c. I insist that you feed the cat.

We often use sentences like these to direct / constrain one another's future behavior.

Truth-values

But as we already saw, uses of imperatives fail basic tests for truth-conditionality:

(17) a. I told you to feed the cat.

b. That's not true.

(18) a. Feed the cat!

b. # That's not true.

Imperatives lack truth-values as well as accessible truth conditions.

Note that certain performative uses of declarative clauses may also fail this test (we'll come back to this later):

(19) a. I hereby decree: Gia will feed the cat.

b. ? That's not true.

Conditional Antecedents

Imperatives cannot appear in the antecedents of conditionals:

(20) * If go to the store, then get me some cigarettes.

This is not the case for performative uses of declaratives:

(21) If I tell you to go to the store, then get me some cigarettes.

Nor is it the case for 'said-' reports involving imperatives:

(22) If John$_i$ said get him$_i$ cigarettes, then you should.

Imperative Inference

Given the right contextual setup, we seem to be able to draw inferences from one imperative to another:

(23) a. A: Get me some cigarettes.

b. B: But I don't have any cash.

c. A: So go get some cash!

(24) a. A: Get me a beer or a cocktail.

b. B: They don't have cocktails.

c. A: So get me a beer!

Imperatives and Modals

Imperatives also appear to license all sorts of inferences to modal claims:

(25) Context: *It is common ground that the only way to get to the store is to drive.*

a. A: Go to the store.

b. B: I should go warm up the car.

(26) a. A: Get me a beer or a cocktail.

b. B: They don't have cocktails... so I should get him a beer!

Infelicities

There are various infelicities associated with imperative clauses, related to Moore's Paradox: a paradox about infelicitous assertions of the form 'It's raining but I don't know if it's raining'.

(27) Deontic Moore's Paradox (Kaufmann 2012)

a. How do I get to Harlem?

b. Take the A train. # But I don't want you to do this.

(28) Epistemic Possibility (Ninan 2005)

Go to confession! # But I know you won't go.

Though consider:

(29) I don't want you to leave... but go!

(30) Context: *Despotic king addressing his subjects.*

a. I order you: clean up every molecule of dust in this castle. Not that you ever could!

What kinds of constraints do these suggest?

1. Non-propositional semantics;
2. Some effect on public practical commitments;
3. Some effect on how we evaluate modals;
4. Some kind of endorsement condition on use;
5. Some kind of presupposition that imperative can be carried out (ought implies can condition).

Imperatives in Dynamic Pragmatics

Imperative Semantics

Let's discard our earlier assumption that imperatives involve a sentence radical that denotes a proposition.

Instead, we'll suggest that the content of an imperative clause is a property of its addressee – the property instantiated by the addressee when they do as they are told.

The imperative 'Feed the cat' encodes the property instantiated in worlds in which the addressee feeds the cat.

(31) $||\text{Feed the cat!}||^{w,c} =$
$[\lambda w \lambda x : x = \text{addressee}(c) \,.\, \text{x feeds the cat in w}]$

The To-Do List

In addition to a register of the propositions we commonly assume for the purpose of a conversation, let's assume that conversational participants keep track of one another's domain goals.

For each individual i participating in a conversation c, let $TDL(i)$ be the To-Do List for i in c.

Formally, this is "just a set of properties" (Portner 2004: 241), but its conversational function is to impose a ranking on worlds in CS^c_w.

Rankings on Worlds

Some possible world compatible with everything commonly assumed for the purposes of a conversation w_2 is better for i than some other such world w_1 iff w_2 makes some item on i's To-Do List true, and w_1 does not, and these worlds are otherwise in complete agreement with respect to i's To-Do List:

(32) **Partial Ordering (Portner)**: For any $w_1, w_2 \in CS^c_w$, $w_1 <_i w_2$ iff for some $P \in TDL(i)$, $P(w_2)(i) = T$ and $P(w_1)(i) = F$, and for all $Q \in TDL(i)$, if $Q(w_1)(i) = T$, then $Q(w_2)(i) = T$.

Update

Our update function for CS_w^c is to take the set of possible worlds that some proposition describes and intersect it with CS_w^c.

But remember that we can understand CS_w^c as $\cap CG$, where CG is more like a list of propositions commonly accepted, and where update (as defined above) is driven by something new being added to that list.

Of course, there will be all sorts of constraints on what kinds of additions such a list can take: for instance, incompatible contents in CG will not allow CG to drive the production of a context set, causing conversation to collapse.

We might understand these constraints as an extension of the coherence constraints on rational belief states.

Update

Likewise, the ranking on worlds in CS^c_w associated with i is driven by a list of properties: $TDL(i)$.

Update can be understood, then, as just a matter of adding new properties to this list.

Here, too, there will be all sorts of constraints on what kinds of additions such a list can take: these may be constraints that we can understand on the model of constraints concerning rational preference states.

Portner's view is additionally supported by the following two principles: a 'Force-linking' principle and a principle we'll call 'Agent's Commitment'.

Force linking principle

Why is it that the default conversational response to an imperative utterance is to update one's to-do list?

The answer is that we propose a universal force linking principle that basically matches proffered contents with their appropriate registers.

The Discourse Context is universally comprised of at least three components: CG, QUD, TDL.

(33) Generalized Update Function F:

a. F = take a set of objects of type T, and another object of type T, and add the new object to that set.

b. If F can be used to establish the force of a sentence it must be.

Agent's Commitment

"For any participant i, the participants in the conversation mutually agree to deem i's actions rational and cooperative to the extent that those actions in any world $w_1 \in CG$ tend to make it more likely that there is no $w_2 \in CG$ such that $w_1 <_i w_2$." (Portner 2004)

An Example

Let's assume that the context set includes both worlds in which Gia feeds the cat (let's call this class of worlds w_F) and worlds in which she doesn't (w_G).

Now someone says to Gia 'Feed the cat'; if Gia accepts this proposal, then by the Force-linking principle we update her TDL with the property (F) she instantiates in worlds where the proposition that she feeds the cat is true.

By Partial Ordering, worlds in the context set in which this property is instantiated are ranked higher than those in which it is not, e.g.: $w_G < w_F$ in general.

This will have a number of conversational / domain upshots.

An Example

By Agent's Commitment, we now deem Gia's actions rational and cooperative to the extent that those actions promote higher ranked worlds on our partial ordering.

If we assume that such a ranking provides us with an ordering source on prudential ought claims, we can explain inferences like:

(34) Context: It is common ground that in every world in which Gia successfully feeds the cat, she gets out of bed.

a. Feed the cat!

b. I should get out of bed.

Problems

Problems

- Unclear what a ‘To-Do list’ tracks.
- Imperatives may be explicitly conditional.
- Third-person and quantificational overt subjects.

Flavors of Imperative Use

Imperatives can be used in any number of ways, associated with different deontic modalities.

(35) a. Have a beer.

b. You may even take one from the fridge.

(36) a. Get me a beer.

b. You have to get one from the fridge.

But how can the view on which imperatives proffer semantic objects of type $< s, < e, t >>$ to a 'To-Do list' account for this?

Since the account offers no direct connection to modality, we appear to need a near-infinite number of To-Do lists to account for all the different ways we use imperatives.

Conditional Imperatives

(37) If you're thirsty, have some lemonade.

(38) Before you walk into an area where there are lots of high trees, if there might be snipers hiding in the branches, use your flamethrowers to clear away the foliage. (Roberts 2023: 8; after von Fintel & Iatridou 2003)

(39) a. What should I do if the cops arrive?

b. Start shooting. (Roberts 2023)

Unruly Subjects

(40) Everyone grab their partner!

(41) Nobody move! (Veltman 2018)

Imperatives as Performative Modals

Lewis on Deontic Modals

There are two different ways we use deontic modal sentences like 'You should feed the cat': to create obligations and normative facts and to report on those obligations.

In his paper "A Problem About Permission" David Lewis suggests that conversations have two different registers of propositional information: the context set and a permission sphere.

Obligation-creating uses of deonitc modals update the permission sphere; one of our domain goals is to make sure the actual world stays within the permission sphere.

Kratzer on Modals

An evolution of this view trades in the 'permission sphere' technology for (a) a modal base and (b) an ordering source.

The modal base is the register of information against which we interpret modal claims (these need not be propositions in the CG), and the ordering source gives us an ordering on worlds that determines the truth value of different modal claims.

By varying the modal base and ordering source, we can explain how the same sentence can be used with both a deontic and epistemic modal flavor in different contexts.

('According to what we know…' versus 'According to the rules…)

Kratzer on Modals

(42) He ought to be home.

a. Context: *We're trying to figure out where our friend Jake is, and we've just ruled out the possibility that he's at the gym. You know that he's either at the gym or at home and assert the above.* Modal base = worlds compatible with our knowledge; Ordering source = epistemic value.

b. Context: *Jake has the flu but we've just learned that he went to work anyways. One of us utter the above.* Modal base = worlds compatible with what Jake does; Ordering source = prudential value.

Kratzer on Modals

On the Kratzerian view, all modal claims update the context set (rather than a separate propositional register for obligation-generating uses).

But we can still explain obligation generating uses by supposing that in certain contexts, the ordering source itself is coordinated with the attitudes or utterances of the speaker.

People sometimes claim that in such 'performative' contexts, it is not possible to respond to deontic modal claims like 'You must go to the store' with 'False'.

Performative Modals and Truth Conditions

Are there really any such contexts? On the one hand, if I agree to do anything you tell me I have to do, then there's something a bit odd about the following sorts of responses:

(43) a. I order you to go to the store.

b. ? False.

(44) a. You must go to the store.

b. ? That's true.

But I think in general people's intuitions about these things might be mixed...

Deciding Games

Let's just assume that there is some kind of context Π in which deontic modals tend to get this kind of reading. (We might think of such contexts as organized around a kind of practical inquiry about what choice from a set of options an agent ought to make.)

Now let's make the following two assumptions:

- Imperative clauses semantically encode 'should'-claims as their contents; an imperative sentence like 'Feed the cat' means the same thing as 'You should feed the cat'. (type $< s, t >$)
- Imperatives conventionally encode a presupposition that we are in a context of the kind Π, or what Kaufmann calls a non-descriptive context.

This is the general sort of program advanced by Magdalena Kaufmann. But of course the details matter...

Deciding Games

Here are the specific details of the sort of context that Kaufmann thinks imperative sentences conventionally presuppose:

$< S, A, t, CS^c_w, QUD, f, g >$

S, A, t, CS^c_w, and QUD are the speaker, addressee, time, context set, and QUD. f is the salient modal base and g is the salient ordering source.

(45) Practical context:

a. QUD is a decision problem for the addressee, where this is a partition of information where each cell represents a choosable course of events.

b. CS^c_w entails that f and g characterize the relevant modality for resolving the QUD.

Objections

We might still be wary about saying that deontic modal claims – even those that occur in practical contexts – lack targetable truth-conditional contents.

Even if we agree with Kaufmann that this is the case, there are differences between modals and imperatives. Imperatives cannot occur with evaluative sentential adverbs, unlike both performatives and deontic modal claims (exmaples from Roberts 2023):

(46) Unfortunately, I now pronounce you man and wife.

(47) Unfortunately, you must go to bed.

(48) # Unfortunately, go to bed!

Recommended Reading

Paul Portner (2004) “The semantics of imperatives in a theory of clause types”

David Lewis (1975) “A problem about permission”

Angelika Kratzer (1977) “What ‘must’ and ‘can’ must and can mean”

Magdalena Kaufmann (2016) “Fine-tuning natural language imperatives”