

# A compositional take on directive microvariation

Magdalena Kaufmann, University of Connecticut  
magdalena.kaufmann@uconn.edu

SPAGAD lecture series at ZAS, July 1, 2022

# Outline

From sentential forms to directive speech acts

Practical infelicities reveal imperative meaning

A modal semantics for imperatives and minor directives

Cross-linguistic parameterization in directive subjunctives

Root infinitivals (RIs)

# The form/function puzzle

- Clause types: form types paired with specific illocutionary potentials
  - (1)
    - a. Open the window.
    - b. You will open the window.
- Imperatives
  - fit for commands, requests, advice, suggestions, invitations, expressing acquiescence, wishes, . . .
  - unfit for assertions

# The form/function puzzle

- Clause types: form types paired with specific illocutionary potentials
  - (1) a. Open the window.
  - b. You will open the window.
- Imperatives
  - fit for commands, requests, advice, suggestions, invitations, expressing acquiescence, wishes, . . .
  - unfit for assertions
- “proposals about the meaning of imperatives are package deals of a denotational semantics and a dynamic pragmatics”

von Fintel and Iatridou 2017

# The form/function puzzle

- Clause types: form types paired with specific illocutionary potentials

- (1)    a.    Open the window.  
      b.    You will open the window.

- Imperatives

- fit for commands, requests, advice, suggestions, invitations, expressing acquiescence, wishes, . . .
  - unfit for assertions
- “proposals about the meaning of imperatives are package deals of a denotational semantics and a dynamic pragmatics”

von Fintel and Iatridou 2017

- Strong theories (modally, illocutionary, or intentionally specified)

Han 2000; Truckenbrodt 2006; Schwager 2006; Kaufmann 2012; Condoravdi and Lauer 2012; Grosz 2009, Crnič and Trinh 2009; Charlow 2014; Roberts 2015, Harris t.a.; Oikonomou 2016; Starr 2020, a.o.

## Minimal theories

Properties: Hausser 1980; Portner 2005; unmodalized propositions: Huntley 1984; Portner 1997; Lohnstein 2000; action terms

:Segerberg 1989; Mastop 2005; Barker 2010; future contingencies: Eckardt 2011; a.o.

# Fully worked out minimal theory with dynamic pragmatics

Portner 2005, 2007

- Core idea:
  - Contextual representation with storage sites for objects of different types (propositions  $\langle s, t \rangle$ , sets of propositions  $\langle \langle s, t \rangle, t \rangle$ , properties  $\langle s, \langle e, t \rangle \rangle$ )
  - Use conditions for speech act fit syntactic objects:  
'Update storage site that corresponds in logical type.'

# Fully worked out minimal theory with dynamic pragmatics

Portner 2005, 2007

- Core idea:
  - Contextual representation with storage sites for objects of different types (propositions  $\langle s, t \rangle$ , sets of propositions  $\langle \langle s, t \rangle, t \rangle$ , properties  $\langle s, \langle e, t \rangle \rangle$ )
  - Use conditions for speech act fit syntactic objects:  
'Update storage site that corresponds in logical type.'
- Predicts universal prevalence of three main clause types:

Sadock and Zwicky 1985, a.o.

  - Declaratives:  $\langle s, t \rangle \Rightarrow$  **Common Ground**
  - Interrogatives:  $\langle \langle s, t \rangle, t \rangle \Rightarrow$  **Question Set**
  - Imperatives:  $\langle s, \langle e, t \rangle \rangle \Rightarrow$  **To-Do List (TDL) of Addressee**  
TDLs are structured into deontic, bouletic, teleological subparts, and determine what counts as rational behavior.

# Fully worked out minimal theory with dynamic pragmatics

Portner 2005, 2007

- Core idea:
  - Contextual representation with storage sites for objects of different types (propositions  $\langle s, t \rangle$ , sets of propositions  $\langle \langle s, t \rangle, t \rangle$ , properties  $\langle s, \langle e, t \rangle \rangle$ )
  - Use conditions for speech act fit syntactic objects:  
'Update storage site that corresponds in logical type.'
- Predicts universal prevalence of three main clause types:

Sadock and Zwicky 1985, a.o.

  - Declaratives:  $\langle s, t \rangle \Rightarrow$  **Common Ground**
  - Interrogatives:  $\langle \langle s, t \rangle, t \rangle \Rightarrow$  **Question Set**
  - Imperatives:  $\langle s, \langle e, t \rangle \rangle \Rightarrow$  **To-Do List (TDL) of Addressee**  
TDLs are structured into deontic, bouletic, teleological subparts, and determine what counts as rational behavior.
- 'Speech act fit objects':

Clauses with speech act projection cp Portner (2022)

(2) (Being you and) opening the window. no TDL update



## Challenge 1: No 'to do'-imperatives

- Heavier burden on pragmatics: effect too specific to cover all speech acts that can be carried out with imperatives *directly*:

reporting test, Heim 1977; Kaufmann 2019a, 2021:

(3) A: Can I have icecream now?

B: Finish your pasta first! *indirect*

*ok*: B denied A's request for immediate icecream by ordering A to finish his pasta.

## Challenge 1: No 'to do'-imperatives

- Heavier burden on pragmatics: effect too specific to cover all speech acts that can be carried out with imperatives *directly*:

reporting test, Heim 1977; Kaufmann 2019a, 2021:

(3) A: Can I have icecream now?

B: Finish your pasta first! *indirect*

*ok*: B denied A's request for immediate icecream by ordering A to finish his pasta.

- Invitations (or 'permissions') are direct:

(4) A: Have a cookie!

B: No thanks, I'm fine.

*not*: A offered B a cookie by telling them to have one.

Portner (2010): special marking for imperatives that introduce choice, E: covert.

## Challenge 1: No 'to do'-imperatives

- Heavier burden on pragmatics: effect too specific to cover all speech acts that can be carried out with imperatives *directly*:

reporting test, Heim 1977; Kaufmann 2019a, 2021:

(3) A: Can I have icecream now?

B: Finish your pasta first! *indirect*

*ok*: B denied A's request for immediate icecream by ordering A to finish his pasta.

- Invitations (or 'permissions') are direct:

(4) A: Have a cookie!

B: No thanks, I'm fine.

*not*: A offered B a cookie by telling them to have one.

Portner (2010): special marking for imperatives that introduce choice, E: covert.

- Wish-imperatives with settled states of affairs; direct, ineffective on TDLs:

(5) a. Please don't have broken another vase!

Culicover and Jackendoff 1997

b. (Please) be rich!!!

*Before blind date*

## Challenge 2: Minor clause types

- Three major clause types don't exhaust inventory of (clausal) syntactic objects used for speech acts.

Sadock and Zwicky 1985; Altmann 1993, A.o.

- Root infinitivals, subjunctives, perfect participles, THAT-clauses, . . . can have a functional potential similar to, or overlapping with, imperatives (**minor directives**).

(6)    Aufstehen!            Aufgestanden!  
      get.up.INF            get.up.PART2  
      roughly: 'Get up!

German

- If minor directives encode the same minimal semantics, they should behave exactly like imperatives. . .

# Minor clause types aren't exactly like imperatives

- Three main differences:
  - Illocutionary force potential
  - Tolerance of indexicals
  - Tolerance of modal particles

Setting aside embedding, Reis 2003; Gärtner 2014.

Fries 1983; Reis 2003; Gärtner 2013; von Stechow and Iatridou 2017, a.o.

Gärtner 2013; Pak et al. 2022

Altmann 1993; Gärtner 2013, 2017, a.o.

# Minor clause types aren't exactly like imperatives

- Three main differences:

- Illocutionary force potential

Setting aside embedding, Reis 2003; Gärtner 2014.

- Tolerance of indexicals

Fries 1983; Reis 2003; Gärtner 2013; von Stechow 2017, a.o.

- Tolerance of modal particles

Gärtner 2013; Pak et al. 2022

Altmann 1993; Gärtner 2013, 2017, a.o.

- Different minimal semantics?

Promising starting point: no relation to addressee activated (Portner et al., 2019) or overall deficient context-dependence (Pak et al., 2022).

- Content of speech act projection cp?

- How does the lack of addressee-relatedness impact the range of possible illocutionary forces?

- Different types of minimal directives

- Empirical issue: indexical intolerance merits revisiting

# Minor clause types aren't exactly like imperatives

- Three main differences:

- Illocutionary force potential

Setting aside embedding, Reis 2003; Gärtner 2014.

- Tolerance of indexicals

Fries 1983; Reis 2003; Gärtner 2013; von Stechow and Trudgill 2017, a.o.

- Tolerance of modal particles

Gärtner 2013; Pak et al. 2022

Altmann 1993; Gärtner 2013, 2017, a.o.

- Different minimal semantics?

Promising starting point: no relation to addressee activated (Portner et al., 2019) or overall deficient context-dependence (Pak et al., 2022).

- Content of speech act projection cp?

- How does the lack of addressee-relatedness impact the range of possible illocutionary forces?

- Different types of minimal directives

- Empirical issue: indexical intolerance merits revisiting

⇒ Addressing these points may lead to a strong theory.

# Outline

From sentential forms to directive speech acts

Practical infelicities reveal imperative meaning

Practical infelicity 1: Practical Moore Sentences (Mandelkern 2019)

Practical infelicity 2: Distancing Ban

A modal semantics for imperatives and minor directives

Cross-linguistic parameterization in directive subjunctives

Root infinitivals (RIs)



# Practical infelicity 1: 'Practical Moore Sentences'

- Directives clauses ('orders') conjoined with avowal of them coming true are infelicitous Mandelkern 2019 building on Ninan 2005
- (7)
- a. You { **must/have to** } turn in your final paper by the end of the exam period,
  - b. **Turn** your final paper in by the end of the exam period,
  - c. **I order you to** turn in your final paper by the end of the exam period,  
#but I don't know if you will turn your paper in by then.

# Practical infelicity 1: 'Practical Moore Sentences'

- Directives clauses ('orders') conjoined with avowal of them coming true are infelicitous Mandelkern 2019 building on Ninan 2005
  - (7)
    - a. You { **must/have to** } turn in your final paper by the end of the exam period,
    - b. **Turn** your final paper in by the end of the exam period,
    - c. **I order you to** turn in your final paper by the end of the exam period,  
#but I don't know if you will turn your paper in by then.
  - Mandelkern: similar to classical Moore paradox
    - (8) #It's raining but I don't believe it's raining.

# Practical infelicity 1: 'Practical Moore Sentences'

- Directives clauses ('orders') conjoined with avowal of them coming true are infelicitous Mandelkern 2019 building on Ninan 2005
  - (7)
    - a. You { **must/have to** } turn in your final paper by the end of the exam period,
    - b. **Turn** your final paper in by the end of the exam period,
    - c. **I order you to** turn in your final paper by the end of the exam period,  
#but I don't know if you will turn your paper in by then.
  - Mandelkern: similar to classical Moore paradox
    - (8) #It's raining but I don't believe it's raining.
  - there are many situations "in which practical Moore sentences can be true" (like classical) [...] "in which they can be believed and known; and in which either conjunct, on its own, can be felicitously asserted" (unlike classical) [...] ⇒ 'Not an issue of content'

Note: 'assertable and knowable' seems odd for sequences involving imperatives; maybe 'issuable while knowing'.

# Practical Moore sentences as posturing failures

- “order together with an avowal of agnosticism about whether the order will be obeyed”, schematically:

$$\text{ORDER}(\phi) \wedge \text{OPEN}(\neg\phi)$$

# Practical Moore sentences as posturing failures

- “order together with an avowal of agnosticism about whether the order will be obeyed”, schematically:

$$\text{ORDER}(\phi) \wedge \text{OPEN}(\neg\phi)$$

- **Posturing**: ‘When you order someone to  $\phi$ , you must act towards them as if you believe that they will  $\phi$ .’  
( $\approx$  “Fake it or you won’t make it!”, Si Kai Lee, p.c.)

# 'Not an issue of semantics'

- Mandelkern argues that Practical Moore sentences are semantically unproblematic:
  1. Intuitively believable and knowable, nothing wrong with thinking that they won't obey
  2. No Practical Moore effect with descriptive uses
  3. Practical Moore sentences are fine in embedded occurrences

# 'Not an issue of semantics'

- Mandelkern argues that Practical Moore sentences are semantically unproblematic:
  1. Intuitively believable and knowable, nothing wrong with thinking that they won't obey
  2. No Practical Moore effect with descriptive uses
  3. Practical Moore sentences are fine in embedded occurrences

# 'Not an issue of semantics'

- Mandelkern argues that Practical Moore sentences are semantically unproblematic:
  1. Intuitively believable and knowable, nothing wrong with thinking that they won't obey
  2. No Practical Moore effect with descriptive uses
  3. Practical Moore sentences are fine in embedded occurrences



# 'Not an issue of semantics'

- Mandelkern argues that Practical Moore sentences are semantically unproblematic:
  1. Intuitively believable and knowable, nothing wrong with thinking that they won't obey
  2. No Practical Moore effect with descriptive uses
  3. Practical Moore sentences are fine in embedded occurrences
- **Finding:** His arguments aren't equally applicable to all linguistic types of Practical Moore sentences  $\Rightarrow$  suggests a role for conventional encoding after all.

## 'No Practical Moore effect in non-order (descriptive) uses'

- Practical Moore sentences involve performative uses; modals also have descriptive uses (Kamp, 1973; Lewis, 1979)

## 'No Practical Moore effect in non-order (descriptive) uses'

- Practical Moore sentences involve performative uses; modals also have descriptive uses (Kamp, 1973; Lewis, 1979)
- With overt **source modification** (9) and without (10b):

(9) **According to local custom**, you have to take exactly two lumps of sugar in your coffee. But you should not feel bound by local custom, and for all I know you will take more than two! (his 33)

- (10) a. [Client:] what is my legal obligation, and what do you expect me to do?
- b. [Lawyer:] You have to report your liability, but I don't know if you will; you may prefer to push the limits of the law and just conceal it. (his 34)

## 'No Practical Moore effect in non-order (descriptive) uses'

- Practical Moore sentences involve performative uses; modals also have descriptive uses (Kamp, 1973; Lewis, 1979)
- With overt **source modification** (9) and without (10b):
  - (9) **According to local custom**, you have to take exactly two lumps of sugar in your coffee. But you should not feel bound by local custom, and for all I know you will take more than two! (his 33)
  - (10)
    - a. [Client:] what is my legal obligation, and what do you expect me to do?
    - b. [Lawyer:] You have to report your liability, but I don't know if you will; you may prefer to push the limits of the law and just conceal it. (his 34)
- In contrast to *have to*, *must* dislikes being descriptive in the absence of overt modification (Ninan, 2005) (with *must*: (9) ✓, (10b): #)

## 'No Practical Moore effect in non-order (descriptive) uses'

- Practical Moore sentences involve performative uses; modals also have descriptive uses (Kamp, 1973; Lewis, 1979)
- With overt **source modification** (9) and without (10b):
  - (9) **According to local custom**, you have to take exactly two lumps of sugar in your coffee. But you should not feel bound by local custom, and for all I know you will take more than two! (his 33)
  - (10)
    - a. [Client:] what is my legal obligation, and what do you expect me to do?
    - b. [Lawyer:] You have to report your liability, but I don't know if you will; you may prefer to push the limits of the law and just conceal it. (his 34)
- In contrast to *have to*, *must* dislikes being descriptive in the absence of overt modification (Ninan, 2005) (with *must*: (9) ✓, (10b): #)
- Imperatives lack descriptive uses and dislike overt source modification:
  - (11) Take two lumps of sugar!  
*reactions*: #That's (not) true./#She made an assertion.
  - (12) #According to local custom, take exactly two lumps of sugar.

# 'No Practical Moore with non-order imperatives'

- No Practical Moore effect with **indifference sequences**.

But: more general 'absence of commitment' move ( $\approx$  speech act denegation, Krifka 2014)

- (13) a. Close the window! Don't close the window! I don't care at all.  
b. You might close the window; but close it, don't close it, what do I care?
- (14) a. You closed the window, you didn't close the window, I don't care at all.  
b. You have to close the window, you don't have to close the window, I don't care at all.

# 'No Practical Moore with non-order imperatives'

- No Practical Moore effect with **indifference sequences**.

But: more general 'absence of commitment' move ( $\approx$  speech act denegation, Krifka 2014)

(13) a. Close the window! Don't close the window! I don't care at all.  
b. You might close the window; but close it, don't close it, what do I care?

(14) a. You closed the window, you didn't close the window, I don't care at all.  
b. You have to close the window, you don't have to close the window, I don't care at all.

- Permissions behave like disjunctive orders for Practical Moore:

(15) a. You can have only one piece of fruit. Have a pear! Have an apple! I don't know which one you'll take. his (39)  
b. #... I know you might not take one.

# 'No Practical Moore with non-order imperatives'

- No Practical Moore effect with **indifference sequences**.

But: more general 'absence of commitment' move ( $\approx$  speech act denegation, Krifka 2014)

(13) a. Close the window! Don't close the window! I don't care at all.  
b. You might close the window; but close it, don't close it, what do I care?

(14) a. You closed the window, you didn't close the window, I don't care at all.  
b. You have to close the window, you don't have to close the window, I don't care at all.

- Permissions behave like disjunctive orders for Practical Moore:

(15) a. You can have only one piece of fruit. Have a pear! Have an apple! I don't know which one you'll take. his (39)  
b. #... I know you might not take one.

- Imperatives cannot be pushed into descriptive uses, and in all committing uses considered so far, Practical Moore sentences result.



## Practical Infelicity 2: Distancing Ban

- Frank (1996) finds different analogue between deontic modality and classical Moore sentences:

(16) #You should go to Paris, but I don't advise you to.

## Practical Infelicity 2: Distancing Ban

- Frank (1996) finds different analogue between deontic modality and classical Moore sentences:

(16) #You should go to Paris, but I don't advise you to.

- For imperatives, Kaufmann (2012) (**Distancing Ban**, Stegovec and Kaufmann 2015):

(17) #Go to Paris, but I absolutely don't want you to.

## Practical Infelicity 2: Distancing Ban

- Frank (1996) finds different analogue between deontic modality and classical Moore sentences:

(16) #You should go to Paris, but I don't advise you to.

- For imperatives, Kaufmann (2012) (**Distancing Ban**, Stegovec and Kaufmann 2015):

(17) #Go to Paris, but I absolutely don't want you to.

- Again, modals escape at least with overt (*must*), some also covert (*have to*), source modification (*according to...*).

# Crosslinguistic comparison

- Practical infelicities persist for imperatives as investigated so far
- Differences as found between *must* and *have to* for practical infelicities are replicated by Japanese *beki* vs. *nakerebanaranai*  
Suggests: class of **default subjective modals**.

# Japanese *beki* vs. *nakerebanaranai*

On-going joint work with Stefan Kaufmann, Teruyuki Mizuno, and Muye Yang.

- Unmodified:

*beki*: both practical infelicities; *nakereba naranai*: neither

- (18) Jiroo wa asita ronbu o { a. das-ana-kereba  
Jiroo TOP tomorrow paper ACC hand.in-NEG-COND  
nar-ana-i./ b. #das-u beki da. } Demo,  
become-NEG-NPST./ hand.in-NPST BEKI COP.NPST but,  
kitto das-ana-i.  
most.likely hand.in-NEG-NPST  
'Jiroo has to hand in this paper tomorrow. But most likely he won't.'

- (19) Jiroo wa asita ronbu o { a. das-ana-kereba  
Jiroo TOP tomorrow paper ACC hand.in-NEG-COND  
nar-ana-i./ b. #das-u beki da. } Demo  
become-NEG-NPST./ hand.in-NPST BEKI COP.NPST but  
hontoo wa soo site hosi-kuna-i  
really TOP so do want-NEG-NPST)  
'Jiroo has to hand in this paper tomorrow. But I absolutely don't want  
him, too.'

# Japanese *beki* vs. *nakerebanaranai*

On-going joint work with Stefan Kaufmann, Teruyuki Mizuno, and Muye Yang.

- Unmodified:

*beki*: both practical infelicities; *nakereba naranai*: neither

- (18) Jiroo wa asita ronbu o { a. das-ana-kereba  
Jiroo TOP tomorrow paper ACC hand.in-NEG-COND  
nar-ana-i./ b. #das-u beki da. } Demo,  
become-NEG-NPST./ hand.in-NPST BEKI COP.NPST but,  
kitto das-ana-i.  
most.likely hand.in-NEG-NPST  
'Jiroo has to hand in this paper tomorrow. But most likely he won't.'

- (19) Jiroo wa asita ronbu o { a. das-ana-kereba  
Jiroo TOP tomorrow paper ACC hand.in-NEG-COND  
nar-ana-i./ b. #das-u beki da. } Demo  
become-NEG-NPST./ hand.in-NPST BEKI COP.NPST but  
hontoo wa soo site hosi-kuna-i  
really TOP so do want-NEG-NPST)  
'Jiroo has to hand in this paper tomorrow. But I absolutely don't want  
him, too.'

- Overt source modification:

Nominalization (*no da*) renders *beki* acceptable

# Form – Context – Practical Infelicities?

Tolerance of matrix level 'but maybe not  $\phi$ ' (agnosticism tolerance):

Item	Unmodified matrix	Modified matrix	Compl. clause
<i>have to</i> (E)	✓	✓	✓
<i>nakerebanarani</i> (J)	✓	✓	✓
<i>must</i> (E)	–	✓	✓
<i>beki</i> (J)	–	✓	✓
Imperatives	–	–	✓ / *

# Outline

From sentential forms to directive speech acts

Practical infelicities reveal imperative meaning

**A modal semantics for imperatives and minor directives**

Cross-linguistic parameterization in directive subjunctives

Root infinitivals (RIs)



## Mandelkern updated

- Practical Moore Sentences reflect a conflict at the layer of conversational moves (speech acts) ✓

# Mandelkern updated

- Practical Moore Sentences reflect a conflict at the layer of conversational moves (speech acts) ✓
- But: some forms are constrained to Moore paradoxical uses (a matter of semantics after all)
  - always: imperatives [*to be revised*],
  - without overt source modification: **default-subjective modals** (E *must*, J *be ki*)

# Mandelkern updated

- Practical Moore Sentences reflect a conflict at the layer of conversational moves (speech acts) ✓
- But: some forms are constrained to Moore paradoxical uses (a matter of semantics after all)
  - always: imperatives [*to be revised*],
  - without overt source modification: **default-subjective modals** (E *must*, J *beki*)
- Practical Moore Sentences result from a conflict in conversational moves, but the tie to the relevant directive-like conversational move is conventionally encoded in some forms:
  - Imperatives
  - (to some extent) default-subjective modals

## Conventionally directive/ORDER (-?)

- Imperatives can be used non-directively in direct speech acts:

- (20)
- |    |  |                            |
|----|--|----------------------------|
| a. | A: How do I get to Harlem?<br>B: Take the A-train. | Disinterested Advice       |
| b. | Have another cookie!                               | Invitations ('Permission') |
| c. | A: Can I open the window?<br>B: Sure, open it.     | Acquiescence               |
| d. | Ok, then go to that damn party!                    | Concession                 |
| e. | Please be blond!                                   | Wish                       |

## Conventionally directive/ORDER (-?)

- Imperatives can be used non-directively in direct speech acts:

(20)	a.	A: How do I get to Harlem? B: Take the A-train.	Disinterested Advice
	b.	Have another cookie!	Invitations ('Permission')
	c.	A: Can I open the window? B: Sure, open it.	Acquiescence
	d.	Ok, then go to that damn party!	Concession
	e.	Please be blond!	Wish

- One attempt at an illocutionary underspecified semantics:

### Modal Operator Account

Schwager 2006; Kaufmann 2012, 2019a; Grosz 2009; Oikonomou 2016; Francis t.a.; Ihara 2020, a.o.

- Modal operator, underspecified in modal flavor  
(for modals Kratzer, 1981, 1991, 2012)
- Presuppositions restrict felicitous modal flavors  
(Default-subjective modals (partly) share these as preferences/defaults.)

# Classifying imperatives by speech acts

- All but wish-imperatives are practical: convey what to do (solution to decision problem)
- Wish-imperatives are severely restricted. . .

# Wish imperatives don't come for free

- '[...] *only if it is taken for granted that speaker and addressee have no influence on the realization of the content.*' (Condoravdi and Lauer, 2012)
- Settled prejacents (*please/imploring intonation*):

- (21)
- a. Please have the keys with you!
  - b. Please don't have broken another vase!
  - c. Please be rich!
  - d. Please don't be dead, Ginny!

J. K. Rowling

# Wish imperatives don't come for free

- '[...] *only if it is taken for granted that speaker and addressee have no influence on the realization of the content.*' (Condoravdi and Lauer, 2012)
- Settled prejacent (*please/imploring intonation*):

- (21)
- a. Please have the keys with you!
  - b. Please don't have broken another vase!
  - c. Please be rich!
  - d. Please don't be dead, Ginny!

J. K. Rowling

- Limited, language-specific inventory of well-wishes, in the addressee's interest, lack of full control taken for granted

- (22)
- a. Get well soon!
  - b. Have a good life!
  - c. Get work done on the train!

??Wish



# Interpreting modals and directives

- Prioritizing modals and imperatives are indexed for the contextually salient prioritizing modal flavor  $R$

## Interpreting modals and directives

- Prioritizing modals and imperatives are indexed for the contextually salient prioritizing modal flavor  $R$

- (23)
- a. You must close the door!
  - b. Close the door!

## Interpreting modals and directives

- Prioritizing modals and imperatives are indexed for the contextually salient prioritizing modal flavor  $R$

- (23)    a.    You must close the door!  
          b.    Close the door!

– both translate to:  $\square^R$  close(you,the-door)

# Interpreting modals and directives

- Prioritizing modals and imperatives are indexed for the contextually salient prioritizing modal flavor  $R$

- (23)    a.    You must close the door!  
          b.    Close the door!

- both translate to:  $\Box^R \text{close}(\text{you}, \text{the-door})$
- the proposition expressed in a context  $c$  is true at a world  $w$  iff the addressee $_c$  closes the door in all  $w'$  s.t.  $w'$  is  $R_c$ -accessible from  $w$ .

# Interpreting modals and directives

- Prioritizing modals and imperatives are indexed for the contextually salient prioritizing modal flavor  $R$

- (23)    a.    You must close the door!  
          b.    Close the door!

- both translate to:  $\Box^R \text{close}(\text{you}, \text{the-door})$
- the proposition expressed in a context  $c$  is true at a world  $w$  iff the addressee $_c$  closes the door in all  $w'$  s.t.  $w'$  is  $R_c$ -accessible from  $w$ .

Weaker imperatives (invitations) derived pragmatically (Kaufmann, 2012), or underspecified modal force, e.g. Grosz 2009; Oikonomou 2016

- Modals '*must*  $\phi$ '  
is used performatively in a **performative context**, else, it is used descriptively.

- Modals '*must*  $\phi$ '  
is used performatively in a **performative context**, else, it is used descriptively.
- Imperative 'ImpOP  $\phi$ '  
presupposes that the context is performative (by uttering an imperative, the speaker becomes publicly committed to believing that their context has the required properties).

- Modals '*must*  $\phi$ '  
is used performatively in a **performative context**, else, it is used descriptively.
- Imperative 'ImpOP  $\phi$ '  
presupposes that the context is performative (by uttering an imperative, the speaker becomes publicly committed to believing that their context has the required properties).
- Speakers become publicly committed to believing the proposition expressed, but not an **assertion** at speech act level  
(Stalnaker, 1978; Kaufmann, 2019a)



# Gap between knowledge and action

(Kaufmann, 2019b)

- Performative contexts involve an interplay between a **Director** (source of practical knowledge) and **Instigator** (Agent in control of course of events)

# Gap between knowledge and action

(Kaufmann, 2019b)

- Performative contexts involve an interplay between a **Director** (source of practical knowledge) and **Instigator** (Agent in control of course of events)
- Second person matrix imperatives with falling intonation:  
Director = Speaker  
Instigator = Addressee

# Gap between knowledge and action

(Kaufmann, 2019b)

- Performative contexts involve an interplay between a **Director** (source of practical knowledge) and **Instigator** (Agent in control of course of events)
- Second person matrix imperatives with falling intonation:  
Director = Speaker  
Instigator = Addressee
- Minor directives (e.g. subjunctives) with non 2p-subjects may reset Instigator; embedding, question formation can reset Director (Kaufmann, 2019b)

# Performative contexts for 2p modals and imperatives

- EAC and EUC are mutual joint belief:

# Performative contexts for 2p modals and imperatives

- EAC and EUC are mutual joint belief:

Epistemic Authority Condition (EAC)

Director (= Speaker) has perfect knowledge of what is necessary w.r.t. salient prioritizing modal flavor  $R$ .

# Performative contexts for 2p modals and imperatives

- EAC and EUC are mutual joint belief:

## Epistemic Authority Condition (EAC)

Director (= Speaker) has perfect knowledge of what is necessary w.r.t. salient prioritizing modal flavor  $R$ .

## Epistemic Uncertainty Condition (EUC)

(If not for their current utterance  $\phi!$ ), Director (= Speaker) holds possible  $\phi$  and  $\neg\phi$ .

# Performative contexts for 2p modals and imperatives

- EAC and EUC are mutual joint belief:
  - **Epistemic Authority Condition (EAC)**  
Director (= Speaker) has perfect knowledge of what is necessary w.r.t. salient prioritizing modal flavor  $R$ .
  - **Epistemic Uncertainty Condition (EUC)**  
(If not for their current utterance  $\phi!$ ), Director (= Speaker) holds possible  $\phi$  and  $\neg\phi$ .
- and the context is either

# Performative contexts for 2p modals and imperatives

- EAC and EUC are mutual joint belief:
  - Epistemic Authority Condition (EAC)  
Director (= Speaker) has perfect knowledge of what is necessary w.r.t. salient prioritizing modal flavor  $R$ .
  - Epistemic Uncertainty Condition (EUC)  
(If not for their current utterance  $\phi!$ ), Director (= Speaker) holds possible  $\phi$  and  $\neg\phi$ .
- and the context is either
  - practical:  
Question under Discussion is a decision problem for the Instigator (= Addressee) and contextually salient modal flavor  $R$  is **decisive** [*to be unpacked*],



# Performative contexts for 2p modals and imperatives

- EAC and EUC are mutual joint belief:
  - Epistemic Authority Condition (EAC)  
Director (= Speaker) has perfect knowledge of what is necessary w.r.t. salient prioritizing modal flavor  $R$ .
  - Epistemic Uncertainty Condition (EUC)  
(If not for their current utterance  $\phi!$ ), Director (= Speaker) holds possible  $\phi$  and  $\neg\phi$ .
- and the context is either
  - practical:  
Question under Discussion is a decision problem for the Instigator (= Addressee) and contextually salient modal flavor  $R$  is **decisive** [*to be unpacked*],
  - or the context **cannot be construed as practical** and is **expressive**:  $R$  encodes the Director's (= Speaker's) **effective preferences** (realistic, consistent, Condoravdi and Lauer 2012)

# Unpacking Decisive Modality (DM)

- Given context set  $CS$  (the set of worlds compatible with mutual joint belief) and a salient partition  $\Delta$  (a decision problem) on  $CS$ , a modal flavor  $R$  is **decisive** iff it constitutes the contextually agreed upon criteria to choose the preferred cell.

# Unpacking Decisive Modality (DM)

- Given context set  $CS$  (the set of worlds compatible with mutual joint belief) and a salient partition  $\Delta$  (a decision problem) on  $CS$ , a modal flavor  $R$  is **decisive** iff it constitutes the contextually agreed upon criteria to choose the preferred cell.
- $\Delta$  is a decision problem for an **Instigator**  $\alpha$  iff for all  $q \in \Delta$ ,  
try( $\alpha, q$ )  $\cap CS \neq \emptyset$ , and  
try( $\alpha, q$ )  $\rightarrow$  cause( $\alpha, q$ )                      ‘ $\alpha$  controls/can reliably bring about  $q$ ’

# Unpacking Decisive Modality (DM)

- Given context set  $CS$  (the set of worlds compatible with mutual joint belief) and a salient partition  $\Delta$  (a decision problem) on  $CS$ , a modal flavor  $R$  is **decisive** iff it constitutes the contextually agreed upon criteria to choose the preferred cell.
- $\Delta$  is a decision problem for an **Instigator**  $\alpha$  iff for all  $q \in \Delta$ ,  
try( $\alpha, q$ )  $\cap CS \neq \emptyset$ , and  
try( $\alpha, q$ )  $\rightarrow$  cause( $\alpha, q$ )                      ‘ $\alpha$  controls/can reliably bring about  $q$ ’
- $R$  being the **decisive modality** in a context  $c$  implies:
  - If  $\Box^R q$ , no participant in  $c$  effectively prefers  $\neg q$ .
  - If  $\Delta$  is a decision problem for participant  $\alpha$ ,  $\alpha$  tries to find out if  $\Box^R q$  for any  $q \in \Delta$ .
  - If participant  $\alpha$  learns that  $\Box^R q$  for  $q \in \Delta$ ,  $\alpha$  tries to realize  $q$ .

Kaufmann and Kaufmann 2012

# Imperative speech acts: practical cases

- **Command:**

*Close the door.*

practical,  $R$  = the speaker's orders

# Imperative speech acts: practical cases

- **Command:**

*Close the door.*

practical,  $R$  = the speaker's orders

# Imperative speech acts: practical cases

- **Command:**  
*Close the door.* practical,  $R$  = the speaker's orders
- **(Disinterested) Advice:** no speaker preference (neutral is ok)  
A: *How do I get to Harlem?*  
B: *Take the A-train.* practical,  $R$  = the addressee's goals

# Imperative speech acts: practical cases

- **Command:**  
*Close the door.* practical,  $R =$  the speaker's orders
- **(Disinterested) Advice:** no speaker preference (neutral is ok)  
A: *How do I get to Harlem?*  
B: *Take the A-train.* practical,  $R =$  the addressee's goals
- **Invitation:** no speaker preference (neutral is ok)  
*Have a seat.* practical,  $R =$  the addressee's desires

See Kaufmann 2012. Alternative:  $\diamond + R =$  speaker's preferences, Oikonomou 2016



# Imperative speech acts: practical cases

- **Command:**  
*Close the door.* practical,  $R =$  the speaker's orders
  - **(Disinterested) Advice:** no speaker preference (neutral is ok)  
A: *How do I get to Harlem?*  
B: *Take the A-train.* practical,  $R =$  the addressee's goals
  - **Invitation:** no speaker preference (neutral is ok)  
*Have a seat.* practical,  $R =$  the addressee's desires
- See Kaufmann 2012. Alternative:  $\diamond + R =$  speaker's preferences, Oikonomou 2016
- **Acquiescence:** no speaker preference (neutral is ok)  
A: *I'm cold, can I close the window?*  
B: *Sure, (go ahead), close it.* practical,  $R =$  the addressee's goals

# Imperative speech acts: expressive cases

# Imperative speech acts: expressive cases

- Imperative wishes/Settled wishes: no control (note: Addressee can be absent)  
*Please be rich!*      expressive,  $R$  = the speaker's effective preferences

# Imperative speech acts: expressive cases

- **Imperative wishes/Settled wishes**: no control (note: Addressee can be absent)  
*Please be rich!*      expressive,  $R$  = the speaker's effective preferences
- **Imperative wishes** (not settled, soliloquy)  
*Please jump!!!*      expressive,  $R$  = the speaker's effective preferences

# Predictions for practical infelicities

- All imperatives are subject to the Distancing Ban  
(= Practical infelicity 2)

# Predictions for practical infelicities

- All imperatives are subject to the Distancing Ban  
(= Practical infelicity 2)
  - All **practical imperatives** yield Practical Moore Sentences  
(= Practical infelicity 1)
- Follows from proposition expressed + EAC + decisive modality

(Kaufmann, 2019b)

# Predictions for practical infelicities

- All imperatives are subject to the Distancing Ban  
(= Practical infelicity 2)
- All **practical imperatives** yield Practical Moore Sentences  
(= Practical infelicity 1)  
Follows from proposition expressed + EAC + decisive modality  
(Kaufmann, 2019b)
- **Expressive imperatives** (wishes) are not predicted to yield Practical Moore Sentences—borne out:

- (24)
- a. Omg, where are you, please be in that room!!!
  - b. I don't know where the keys are. . . please have them with you!!!

# Predictions for practical infelicities

- All imperatives are subject to the Distancing Ban  
(= Practical infelicity 2)
- All **practical imperatives** yield Practical Moore Sentences  
(= Practical infelicity 1)

Follows from proposition expressed + EAC + decisive modality

(Kaufmann, 2019b)

- **Expressive imperatives** (wishes) are not predicted to yield Practical Moore Sentences—borne out:

- (24)
- a. Omg, where are you, please be in that room!!!
  - b. I don't know where the keys are. . . please have them with you!!!

- Modal verbs are predicted to be subject to one or both practical infelicities depending on what modal flavor they combine with.



# Predictions for practical infelicities

- All imperatives are subject to the Distancing Ban  
(= Practical infelicity 2)
- All **practical imperatives** yield Practical Moore Sentences  
(= Practical infelicity 1)

Follows from proposition expressed + EAC + decisive modality

(Kaufmann, 2019b)

- **Expressive imperatives** (wishes) are not predicted to yield Practical Moore Sentences—borne out:

- (24)
- a. Omg, where are you, please be in that room!!!
  - b. I don't know where the keys are. . . please have them with you!!!

- Modal verbs are predicted to be subject to one or both practical infelicities depending on what modal flavor they combine with.  
In the absence of overt source modification, default subjective modals (E *must*, J *be ki*) anchor to the flavor relevant for imperatives.

# Doubts about the disjunction

- Why would this disjunctive meaning (practical vs. expressive) be crosslinguistically stable?

# Doubts about the disjunction

- Why would this disjunctive meaning (practical vs. expressive) be crosslinguistically stable?
  - Hope from Greek: Oikonomou (2016):  
True imperatives are not used for wishes like *Get well soon!* (*na-* or *as-*subjunctives instead)

# Doubts about the disjunction

- Why would this disjunctive meaning (practical vs. expressive) be crosslinguistically stable?
  - Hope from Greek: Oikonomou (2016):  
True imperatives are not used for wishes like *Get well soon!* (*na-* or *as-*subjunctives instead)
  - But Greek has wish-imperatives after all (Despina Oikonomou, email 05/2018)

(25) [Context: me, after waiting for hours in front of the locked house, seeing my husband approaching, still out of earshot]

- a. ah ehe ta klidja mazi su...  
ah have.IMP the keys with you...  
'Please have the keys with you!!!'

# Wish-imperatives are 'practical optatives'

- Main clause conditional antecedents (crosslinguistically frequent):

(26)	a.	If only he comes in time!	indicative optative
	b.	If only he had come in time!	subjunctive optative





# Wish-imperatives are ‘practical optatives’

- Main clause conditional antecedents (crosslinguistically frequent):

(26)	a.	If only he comes in time!	indicative optative
	b.	If only he had come in time!	subjunctive optative

- Imperative wishes require realism (indicative optatives), but also something practical:

(27) [Context: me, after waiting for hours in front of the locked house, seeing my husband approaching, still out of earshot]

- a. ah ehe ta klidja mazi su...  
ah have.IMP the keys with you...  
‘Please have the keys with you!!!’

(28) ah as ehis ta klidja mazi su  
ah let have.2sg the keys with you

‘it’s like in the imperative I put some effort to bring about the desired result, the wish can just be a desperate wish without any attempt’

(Despina Oikonomou, email 05/23/2018)

- Unify after all?

A decision problem for nature? The universe? (Sven Lauer, p.c.) Abuse of effective preferences?



# Outline

From sentential forms to directive speech acts

Practical infelicities reveal imperative meaning

A modal semantics for imperatives and minor directives

**Cross-linguistic parameterization in directive subjunctives**

Root infinitivals (RIs)

## Directive subjunctives: 3p subject puzzle

True morphosyntactic imperatives have 2p(-ish) subjects, but subjunctives allow for any person value: who is supposed to act (Instigator) when the subject is 3p?

- View 1: Directive subjunctives with 3p subjects always place *See to it that* . . .-obligations on the addressee  
(Zanuttini 2008 building on English, Bhojpuri, Italian; Isac 2015)

## Directive subjunctives: 3p subject puzzle

True morphosyntactic imperatives have 2p(-ish) subjects, but subjunctives allow for any person value: who is supposed to act (Instigator) when the subject is 3p?

- View 1: Directive subjunctives with 3p subjects always place *See to it that*. . .-obligations on the addressee  
(Zanuttini 2008 building on English, Bhojpuri, Italian; Isac 2015)
- View 2: *See to it that*. . .-obligations on the addressee tend to arise, but are not part of conventional meaning  
(Stegovec 2019 for Slovenian)

## It depends on the language: Romanian *să*/Slovenian *naj*

- Choice of action (decision problem), A in control:  
(29) [Context: Teacher to assistant teacher about a rambling student]  
'He should really shut up!'/ 'See to it that he shuts up!'; ✓*naj*/✓*să*

## It depends on the language: Romanian *să*/Slovenian *naj*

- Choice of action (decision problem), A in control:

(29) [Context: Teacher to assistant teacher about a rambling student]  
'He should really shut up!'/ 'See to it that he shuts up!'; ✓*naj*/✓*să*

- Choice of action (decision problem) but both A and S lack control  
(Instigator = third party):

After Ninan 2005 for *must*

(30) Ma **naj** spremeni ta papež že enkrat svoj pogled na  
but NAJ change this pope already one self's view on  
kontracepcijo!  
contraception  
'This pope should really change his view on contraception.'  
(not: # 'See to it that this pope changes his view on  
contraception.')

- (31) [Context: *We are watching a rambling politician*]

#El **să** tacă din gură  
he SUBJ.PRT shut.up.3Sg of mouth  
roughly # 'See to it that he shuts up.'  
not: 'He should really shut up.'

## It depends on the language: Romanian *să*/Slovenian *naj*

- Choice of action (decision problem), A in control:

(29) [Context: Teacher to assistant teacher about a rambling student]  
'He should really shut up!'/ 'See to it that he shuts up!'; ✓*naj*/✓*să*

- Choice of action (decision problem) but both A and S lack control  
(Instigator = third party):

After Ninan 2005 for *must*

(30) Ma **naj** spremeni ta papež že enkrat svoj pogled na  
but NAJ change this pope already one self's view on  
kontracepcijo!  
contraception  
'This pope should really change his view on contraception.'  
(not: # 'See to it that this pope changes his view on  
contraception.') ✓Slovenian *naj*-subjunctive

- (31) [Context: *We are watching a rambling politician*]

#El **să** tacă din gură  
he SUBJ.PRT shut.up.3Sg of mouth  
roughly # 'See to it that he shuts up.'  
not: 'He should really shut up.'

## It depends on the language: Romanian *să*/Slovenian *naj*

- Choice of action (decision problem), A in control:

(29) [Context: Teacher to assistant teacher about a rambling student]  
'He should really shut up!'/ 'See to it that he shuts up!'; ✓*naj*/✓*să*

- Choice of action (decision problem) but both A and S lack control  
(Instigator = third party):

After Ninan 2005 for *must*

(30) Ma **naj** spremeni ta papež že enkrat svoj pogled na  
but NAJ change this pope already one self's view on  
kontracepcijo!  
contraception  
'This pope should really change his view on contraception.'  
(not: # 'See to it that this pope changes his view on  
contraception.') ✓Slovenian *naj*-subjunctive

(31) [Context: *We are watching a rambling politician*]

#El **să** tacă din gură  
he SUBJ.PRT shut.up.3Sg of mouth  
roughly # 'See to it that he shuts up.'  
not: 'He should really shut up.'

## It depends on the language: Romanian *să*/Slovenian *naj*

- Choice of action (decision problem), A in control:

(29) [Context: Teacher to assistant teacher about a rambling student]  
'He should really shut up!'/ 'See to it that he shuts up!'; ✓ *naj*/✓ *să*

- Choice of action (decision problem) but both A and S lack control  
(Instigator = third party):

After Ninan 2005 for *must*

(30) Ma **naj** spremeni ta papež že enkrat svoj pogled na  
but NAJ change this pope already one self's view on  
kontracepcijo!  
contraception  
'This pope should really change his view on contraception.'  
(not: # 'See to it that this pope changes his view on  
contraception.') ✓ Slovenian *naj*-subjunctive

(31) [Context: *We are watching a rambling politician*]

#El **să** tacă din gură  
he SUBJ.PRT shut.up.3Sg of mouth  
roughly # 'See to it that he shuts up.'  
not: 'He should really shut up.' # Romanian *să*-subjunctive



## It depends on the language: Romanian *să*/Slovenian *naj*

- Choice of action (decision problem), A in control:

(29) [Context: Teacher to assistant teacher about a rambling student]  
'He should really shut up!'/ 'See to it that he shuts up!'; ✓ *naj*/✓ *să*

- Choice of action (decision problem) but both A and S lack control  
(Instigator = third party):

After Ninan 2005 for *must*

(30) Ma **naj** spremeni ta papež že enkrat svoj pogled na  
but NAJ change this pope already one self's view on  
kontracepcijo!  
contraception  
'This pope should really change his view on contraception.'  
(not: # 'See to it that this pope changes his view on  
contraception.') ✓ Slovenian *naj*-subjunctive

(31) [Context: *We are watching a rambling politician*]

#El **să** tacă din gură  
he SUBJ.PRT shut.up.3Sg of mouth  
roughly # 'See to it that he shuts up.'  
not: 'He should really shut up.' # Romanian *să*-subjunctive

# What happens in 2p subjunctives?

- Romanian *See to it that*-subjunctives behave roughly like imperatives:

- (32) a. Inchiide uşa!  
open.IMP.2Sg door  
'Open the door!'
- b. Să-nchizi uşa  
SUBJ.PRT open.SUBJ.2P door  
'Open the door'/'you should open the door'

## What happens in 2p subjunctives?

- Romanian *See to it that*-subjunctives behave roughly like imperatives:

(32) a. Inchide ușa!

open.IMP.2Sg door

'Open the door!'

b. Să-nchizi ușa

SUBJ.PRT open.SUBJ.2P door

'Open the door'/'you should open the door'

- Daniela Isac (p.c.): more indirect, adds politeness to commands, no detectable difference for invitations or permissions

# What happens in 2p subjunctives?

- Romanian *See to it that*-subjunctives behave roughly like imperatives:

- (32) a. Inhide ușa!  
open.IMP.2Sg door  
'Open the door!'
- b. Să-nchizi ușa  
SUBJ.PRT open.SUBJ.2P door  
'Open the door'/'you should open the door'

– Daniela Isac (p.c.): more indirect, adds politeness to commands, no detectable difference for invitations or permissions

- Slovenian 2p *naj*: infelicitous
  - Stegovec (2019): blocked by imperatives

## să -subjunctives and imperatives come apart on wishes

- Romanian să ('see to it that'), no wishes:

- (33) a. Te rog fii acolo!  
please be.Imp2Sg there  
'Please be there!!' (✓about future, ✓settled wish)
- b. Te rog să fii acolo  
please SUBJ.PRT be.Subj2Sg there  
'Please be there!!' (✓about the future, ✗settled wish)

## să -subjunctives and imperatives come apart on wishes

- Romanian *să* ('see to it that'), no wishes:

- (33) a. Te rog fii acolo!  
please be.Imp2Sg there  
'Please be there!!' (✓about future, ✓settled wish)
- b. Te rog să fii acolo  
please SUBJ.PRT be.Subj2Sg there  
'Please be there!!' (✓about the future, ✗settled wish)

- Slovenian: *naj* (truly like imperative).

Like imperatives (which block 2p subjunctive), *naj*-subjunctives (shown: 3p) can be wishes:

- (34) O, prosim bodi pametan!  
O please be.2SgImp smart  
'Please be smart!'

- (35) O, naj bo prosim pametan!  
O, NAJ be.3Sg please smart  
'Please let him be smart!'

# Directive subjunctives parameterized

	compare: imperative	2p subject	<i>see to it that</i> for A	wishes?
Slovenian <i>naj</i> -subj.	same	blocked	can arise pragmatically	ok
Romanian <i>să</i> -subj.	minimally different	ok	encoded conventionally	out

# Directive subjunctives parameterized

	compare: imperative	2p subject	<i>see to it that</i> for A	wishes?
Slovenian <i>naj</i> -subj.	same	blocked	can arise pragmatically	ok
Romanian <i>să</i> -subj.	minimally different	ok	encoded conventionally	out

- Morphosyntactic imperatives and Slovenian *naj*-subjunctives are licensed by a modal operator that presupposes Epistemic Authority (EAC), Epistemic Uncertainty (EUC) and **that the context is practical or cannot be construed as practical and is expressive.**



# Directive subjunctives parameterized

	compare: imperative	2p subject	see to it that for A	wishes?
Slovenian <i>naj</i> -subj.	same	blocked	can arise pragmatically	ok
Romanian <i>să</i> -subj.	minimally different	ok	encoded conventionally	out

- Morphosyntactic imperatives and Slovenian *naj*-subjunctives are licensed by a modal operator that presupposes Epistemic Authority (EAC), Epistemic Uncertainty (EUC) and **that the context is practical or cannot be construed as practical and is expressive.**
- Romanian *să*-subjunctives are licensed by a modal operator that presupposes Epistemic Authority (EAC), Epistemic Uncertainty (EUC) and **that the context is practical** ~~or cannot be construed as practical and is expressive.~~

# Outline

From sentential forms to directive speech acts

Practical infelicities reveal imperative meaning

A modal semantics for imperatives and minor directives

Cross-linguistic parameterization in directive subjunctives

## Root infinitivals (RIs)

Illocutionary force potential

Indexical issues

Deriving directive RIs

# Infinitival directives (root infinitivals, RIs)

- German bare infinitivals in root clauses can be used similarly to imperatives in commands and instructions:

- (36)
- a. Hinsetzen!  
sit.down  
(roughly) 'Sit down!'
  - b. Den Reis langsam kochen.  
the rice slowly cook.INF  
(roughly) 'Let the rice boil slowly' (from Gärtner, 2014)

# Infinitival directives (root infinitivals, RIs)

- German bare infinitivals in root clauses can be used similarly to imperatives in commands and instructions:

- (36)
- a. Hinsetzen!  
sit.down  
(roughly) 'Sit down!'
  - b. Den Reis langsam kochen.  
the rice slowly cook.INF  
(roughly) 'Let the rice boil slowly' (from Gärtner, 2014)

- Unlike imperatives, they don't seem to activate a social relationship between speaker and addressee

Similarly: Italian infinitivals, and more restricted, Korean indirect imperatives, Portner et al. 2019

- Generic instructions or requests (e.g. signs, general rules)  
Non-interlocutor addressee (Portner et al., 2019)
- Specific addressee (interlocutor addressee), but FORMAL/INFORMAL can remain unspecified

# Not only commands

pace von Fintel and Iatridou 2017; Kaufmann 2018

- Practical, but not commands:

(37) Bitte nicht aufregen.  
please not get.up.set.INF  
'Please don't get upset.'  
Plea/Imploration

(38) Ruhig anrufen(, wenn Ihr was braucht).  
MODPART call.INF, if you something need  
'Feel free to call me (-if you need anything).'  
Permission, from Gärtner (2013), Permission

(39) A: I am hot, can I open the window?  
B: Klar, machen Sie es ruhig auf.  
sure, make.IMP you.POL it MODPART open  
B': ??Klar, ruhig aufmachen.  
sure, MODPART make.open.INF  
'Sure, go ahead, open it.'  
Acquiescence

# Not only commands

pace von Fintel and Iatridou 2017; Kaufmann 2018

- Practical, but not commands:

(37) Bitte nicht aufregen.  
please not get.up.set.INF  
'Please don't get upset.'  
Plea/Imploration

(38) Ruhig anrufen(, wenn Ihr was braucht).  
MODPART call.INF, if you something need  
'Feel free to call me (-if you need anything).'  
Permission, from Gärtner (2013), Permission

(39) A: I am hot, can I open the window?  
B: Klar, machen Sie es ruhig auf.  
sure, make.IMP you.POL it MODPART open  
B': ??Klar, ruhig aufmachen.  
sure, MODPART make.open.INF  
'Sure, go ahead, open it.'  
Acquiescence

- Unlike imperatives, non-command RIs want modifiers (*bitte, ruhig*)

## German bare infinitivals absent practicality

- Reminder: imperatives in the absence of control/decision problem turn into 'directive' wishes about the addressee and need to be realistic (epistemically possible) (*bitte/please* or imploring tone)

- (40)
- a. Please have the keys with you!
  - b. Please be tall!
  - c. # { Please / - } be 20 again.

## German RIs absent practicality

- Infinitivals in contexts that cannot be construed as practical turn into **optatives about the speaker** (Reis, 2003; Gärtner, 2014); (*bitte* is odd)

- (41)
- a. Bitte die Schlüssel dabei haben!  
please the keys with.you have.INF  
(only future-oriented directive)
  - b. #Bitte gross sein!  
please tall be.INF
  - c. (#Bitte) noch einmal 20 sein!  
please more once 20 be  
'(Ah) to be 20 again!'



## German RIs absent practicality

- Infinitivals in contexts that cannot be construed as practical turn into **optatives about the speaker** (Reis, 2003; Gärtner, 2014); (*bitte* is odd)

- (41)
- a. Bitte die Schlüssel dabei haben!  
please the keys with.you have.INF  
(only future-oriented directive)
  - b. #Bitte gross sein!  
please tall be.INF
  - c. (#Bitte) noch einmal 20 sein!  
please more once 20 be  
'(Ah) to be 20 again!'

- RI directives prohibit reflexives (Fries, 1983; Gärtner, 2013); infinitival optatives require them—not the same structure.

- (42)
- a. (\*Sich/\*Dich/\*Mich) hinsetzen!  
(self/yourself/myself) sit.down  
for: 'Sit down!'
  - b. (Ah), #(sich/mich) hinsetzen!  
INTERJECTION self/yourself/myself sit.down.INF  
'Ah, to sit down!' optative

## German RIs absent practicality

- Infinitivals in contexts that cannot be construed as practical turn into **optatives about the speaker** (Reis, 2003; Gärtner, 2014); (*bitte* is odd)

- (41)
- a. Bitte die Schlüssel dabei haben!  
please the keys with.you have.INF  
(only future-oriented directive)
  - b. #Bitte gross sein!  
please tall be.INF
  - c. (#Bitte) noch einmal 20 sein!  
please more once 20 be  
'(Ah) to be 20 again!'

- RI directives prohibit reflexives (Fries, 1983; Gärtner, 2013); infinitival optatives require them—not the same structure.

- (42)
- a. (\*Sich/\*Dich/\*Mich) hinsetzen!  
(self/yourself/myself) sit.down  
for: 'Sit down!'
  - b. (Ah), #(sich/mich) hinsetzen!  
INTERJECTION self/yourself/myself sit.down.INF  
'Ah, to sit down!' optative

- RIs (reflexive-less structure) are practical (like R *să*-subjunctives), but 

# Where does the modal meaning come from?

Modal meaning: conventionally encoded or pragmatically derived?

Truckenbrodt (2006) (strong theory) vs. Reis (2003) (minimal theory); comparison Gärtner (2014).

- Tentatively: Modality is conventionally encoded (strong theory for directive infinitivals).

# Indifference sequences compared

(von Fintel and Iatridou, 2017; Kaufmann, 2018; Mandelkern, 2019)

- (43) Steh auf, steh nicht auf [-ist mir doch egal.]  
get up, get not up [-is me.DAT MODPART the.same]  
'Get up, don't get up [- I don't care (*what you do*).]'
- (44) Du stehst auf, du stehst nicht auf [-ist mir doch egal.]  
you get up, you get not up [-is me.DAT MODPART the.same]  
'Get up, don't get up [- I don't care (*what you do*).]'
- (45) Du musst aufstehen, du musst nicht aufstehen [-ist mir  
you must get.up.INF, you must not get.up.INF [-is me.DAT  
doch egal.]  
MODPART the.same]  
'You have to get up, you don't have to get up [-I don't care (*what you have to do*)
- (46) Aufstehen, nicht aufstehen [-was weiß ich was besser ist]  
up.get.INF, not up.get.INF [-what know I what better is]  
'Getting up, not getting up [- I don't know what my/your/?? their best choice is]

# Learning from indifference sequences

Form	Subject	Target of attitude	Attitude
Imperative $!(p)$	$2p$	$p?$	Indifference
Declarative $p$	(overtly encoded)	$p?$	Indifference
<i>must p</i>	(overtly encoded)	<i>(must p)?</i>	Indifference
Infinitival $p$	$2p/1p/\#3p$	<i>(best p)?</i>	Uncertainty

Prioritizing modality retained in infinitivals but not imperatives.

- No modality in  $!(p)?$ –Alternative: you will do what you should do (**Decisive Modality**)  $\Rightarrow$  ‘I don’t care what you [*should and hence*] will do.’
- No person restriction in infinitivals (salient agent or generic  $\Rightarrow$  lack of *and hence agent will*)
- Infinitivals stand out in generating uncertainty rather than indifference

# Rising intonation

- Tentative evidence for the presence of modality across the board:

(47) Steh auf?  
get.IMP up  
'Get up?' ( $\approx$  'Should you get up (maybe)?') Suggestion

But see Rudin (2018) for rising intonation imperatives in a minimal theory.

(48) Aufstehen?  
get.up.INF  
R1: 'Should you get up (maybe)?' ( $\approx$  imperative) Suggestion  
R2: 'Should I get up?' Answer expecting practical question

# Rising intonation

- Tentative evidence for the presence of modality across the board:

(47) Steh auf?  
get.IMP up  
'Get up?' ( $\approx$  'Should you get up (maybe)?') Suggestion

But see Rudin (2018) for for rising intonation imperatives in a minimal theory.

(48) Aufstehen?  
get.up.INF  
R1: 'Should you get up (maybe)?' ( $\approx$  imperative) Suggestion  
R2: 'Should I get up?' Answer expecting practical question

- Rising intonation retains prioritizing modality in imperatives and infinitivals.

# No participants?

Translating from Pak et al. 2022's Italian (9)/(10)

- 2p pronouns seem impossible in directive RIs:

- (49) a. Bring ein Photo von dem Ort, an dem Du  
bring.IMP.2SG a picture of the place at which you.FAM  
lebst.  
live.2Sg.IND  
'Bring a picture of the place where you live.'
- b. #Ein Photo von dem Ort bringen, an dem Du  
a picture of the place bring.INF at which you.FAM  
lebst.  
live.2Sg.IND  
(ok as constituent answer to 'What shall I do?')



# No participants?

Translating from Pak et al. 2022's Italian (9)/(10)

- 2p pronouns seem impossible in directive RIs:

(49) a. Bring ein Photo von dem Ort, an dem Du  
bring.IMP.2SG a picture of the place at which you.FAM  
lebst.

live.2Sg.IND

'Bring a picture of the place where you live.'

b. #Ein Photo von dem Ort bringen, an dem Du  
a picture of the place bring.INF at which you.FAM  
lebst.

live.2Sg.IND

(ok as constituent answer to 'What shall I do?')

- Indexicals in general have a hard time in directive RIs:

(50) a. Bring ein Photo von dem Ort, an dem ich  
bring.IMP.2SG a picture of the place at which I  
lebe.

live.1Sg.IND

'Bring a picture of the place where I live.'

b. #Ein Photo von dem Ort bringen, an dem ich lebe.  
a picture of the place bring.INF at which I live.2Sg.IND  
(ok as a constituent answer to 'What shall I do?')

# Fixed referents across different contexts of reception

- “[Italian] infinitival directives with *qui* ‘here’ or *li* ‘there’ are imaginable if written on a sign with an arrow or pointing finger [...] or affixed to than object that provides the referent of the indexical” (Pak et al., 2022)

- (51)
- |    |  |         |
|----|--|---------|
| a. | Lasciare le chiavi qui.<br>drop.INF the keys here                        | Italian |
| b. | Schlüssel hier einwerfen.<br>keys here drop.INF<br>'Drop the keys here.' | German  |

# Fixed referents across different contexts of reception

- “[Italian] infinitival directives with *qui* ‘here’ or *li* ‘there’ are imaginable if written on a sign with an arrow or pointing finger [...] or affixed to than object that provides the referent of the indexical” (Pak et al., 2022)

- (51)
- |    |  |         |
|----|--|---------|
| a. | Lasciare le chiavi qui.<br>drop.INF the keys here                        | Italian |
| b. | Schlüssel hier einwerfen.<br>keys here drop.INF<br>'Drop the keys here.' | German  |

- 1p appears to remain doomed. Trying sign on a plant:

Italian from Pak et al. 2022, fn. 9

- (52)
- |    |   |         |
|----|---|---------|
| a. | #Bagnarmi.<br>water.INF-me                                  | Italian |
| b. | #Mich giessen.<br>me.ACC water.INF<br>intended: 'Water me!' | German  |

## Directive RI with 1p in G(erman) and I(talian), generic

- *Bagnarmi/Mich giessen* 'water me' might be a syntactic issue (obligatory drop of director-denoting argument) (Stefan Kaufmann, p.c.)

## Directive RI with 1p in G(erman) and I(talian), generic

- *Bagnarmi/Mich giessen* 'water me' might be a syntactic issue (obligatory drop of director-denoting argument) (Stefan Kaufmann, p.c.)
- Improves with focus (and *bitte/prego* 'please'):

(53) a. Bitte nur mich giessen.  
please only me water.INF

b. Innaffiare solo me  
water.INF only me  
'Please water only me.' (not the other plants here)

(54) Mich bitte nicht mitnehmen.  
me.ACC please not take.along.INF

'Me, you shouldn't take along, please.' note on a hotel key

## Directive RI with 1p in G(erman) and I(talian), generic

- *Bagnarmi/Mich giessen* 'water me' might be a syntactic issue (obligatory drop of director-denoting argument) (Stefan Kaufmann, p.c.)
- Improves with focus (and *bitte/prego* 'please'):

(53) a. Bitte nur mich giessen.  
please only me water.INF  
b. Innaffiare solo me  
water.INF only me  
'Please water only me.' (not the other plants here)

(54) Mich bitte nicht mitnehmen.  
me.ACC please not take.along.INF  
'Me, you shouldn't take along, please.' note on a hotel key

- Actual (absent) speaker (no pretending object) after all:  
Fabio del Prete, p.c.

(55) Sign in a public restroom (me = cleaning person):  
a. Rispettare prego il mio lavoro per il vostro benessere  
respect.INF please the my work for the your comfort  
'Please respect my work for your comfort'

# Directive RI with 1p in G(erman) and I(talian), specific

- Photographer to subject(s):

(56) a. (Bitte) alle zu mir schauen!

(please) everyone to me.DAT look.INF

'Everyone look at me, please.'

German

b. Guardare a me per favore!

look.INF at me please

'Look at me, please'

Italian

# Directive RI with 1p in G(erman) and I(talian), specific

- Photographer to subject(s):

(56) a. (Bitte) alle zu mir schauen!  
(please) everyone to me.DAT look.INF

'Everyone look at me, please.'

German

b. Guardare a me per favore!

look.INF at me please

'Look at me, please'

Italian

- 2p pronoun as vocative

Portner et al. 2019: vocatives overtly realize Interlocutor in cp

(57) Du, (bitte) aufpassen!  
you.FAM.VOC, (please) pay.attention.INF

'(Hey,) pay attention, please.'

with *bitte* from Gärtner 2013



# Updated take on indexical tolerance

- No general lack of indexicals *pace* Portner et al. 2019

# Updated take on indexical tolerance

- No general lack of indexicals *pace* Portner et al. 2019
- Minimal requirement:  
Assessment stability, same referent for each recipient (reader).  
Contexts of assessment, MacFarlane (2014)

# Updated take on indexical tolerance

- No general lack of indexicals *pace* Portner et al. 2019
- Minimal requirement:  
*Assessment stability*, same referent for each recipient (reader).  
Contexts of assessment, MacFarlane (2014)
- Speaker-addressee relation can remain fully unspecified in RIs  
Portner et al. 2019

But can be specified overtly by vocatives, but maybe also  
*please*/modal particles (*ruhig*)

# Updated take on indexical tolerance

- No general lack of indexicals *pace* Portner et al. 2019
- Minimal requirement:  
*Assessment stability*, same referent for each recipient (reader).  
Contexts of assessment, MacFarlane (2014)
- Speaker-addressee relation can remain fully unspecified in RIs  
Portner et al. 2019  
But can be specified overtly by vocatives, but maybe also  
*please*/modal particles (*ruhig*)
- Tentatively: non-commands require some indication regarding the  
speaker-addressee relation  
For ideas along these lines, Gärtner 2014  
FORMAL/INFORMAL can remain unsettled even in non-commands.

# Modal operator for bare infinitivals (first stab)

'*best* course of action for the salient agent'

- Directive RIs are licensed by a modal operator that
  - combines with a property (**ought-to-do**)
  - triggers the presuppositions associated with practical imperatives (like *să*-subjunctives); no clause for expressive use

# Modal operator for bare infinitivals (first stab)

'best course of action for the salient agent'

- Directive RIs are licensed by a modal operator that
  - combines with a property (**ought-to-do**)
  - triggers the presuppositions associated with practical imperatives (like *să*-subjunctives); no clause for expressive use
- Roles:
  - Director:  
S or 'speaking object' (commitment), S and A (rising intonation suggestion, Kaufmann 2019b), or A (rising intonation practical question)
  - Instigator:  
S or A (the non-director participant, Kaufmann 2019b)

# Modal operator for bare infinitivals (first stab)

'best course of action for the salient agent'

- Directive RIs are licensed by a modal operator that
  - combines with a property (**ought-to-do**)
  - triggers the presuppositions associated with practical imperatives (like *să*-subjunctives); no clause for expressive use
- Roles:
  - Director:  
S or 'speaking object' (commitment), S and A (rising intonation suggestion, Kaufmann 2019b), or A (rising intonation practical question)
  - Instigator:  
S or A (the non-director participant, Kaufmann 2019b)
- Signs involve deferred evaluation ( $\approx$  context of assessment); felicitous only if proposition expressed is stable (with salient agent: 'whoever reads this')

# Modal operator for bare infinitivals (first stab)

'best course of action for the salient agent'

- Directive RIs are licensed by a modal operator that
  - combines with a property (**ought-to-do**)
  - triggers the presuppositions associated with practical imperatives (like *să*-subjunctives); no clause for expressive use
- Roles:
  - Director:  
S or 'speaking object' (commitment), S and A (rising intonation suggestion, Kaufmann 2019b), or A (rising intonation practical question)
  - Instigator:  
S or A (the non-director participant, Kaufmann 2019b)
- Signs involve deferred evaluation ( $\approx$  context of assessment); felicitous only if proposition expressed is stable (with salient agent: 'whoever reads this')
- Practical only  
Both practical infelicities are predicted to persist ( *#but* INSTIGATOR *might not do it*; *#but* DIRECTOR *absolutely doesn't want* INSTIGATOR *to...* )



# Conclusion and challenges

- Imperatives, directive subjunctives, and infinitivals: encode modality.

# Conclusion and challenges

- Imperatives, directive subjunctives, and infinitivals: encode modality.
- Modal operators license them in main clauses and can be:
  - Practical or expressive (morphosyntactic imperatives, Slovenian *naj*-subj.) vs. practical only (Romanian *să*-subj.; root infinitivals)
  - Propositional (morphosyntactic imperatives, root subjunctives) vs. property-embedding (root infinitivals)

## Conclusion and challenges

- Imperatives, directive subjunctives, and infinitivals: encode modality.
- Modal operators license them in main clauses and can be:
  - Practical or expressive (morphosyntactic imperatives, Slovenian *naj*-subj.) vs. practical only (Romanian *să*-subj.; root infinitivals)
  - Propositional (morphosyntactic imperatives, root subjunctives) vs. property-embedding (root infinitivals)
- RIs can, but need not, encode certain aspects of participant relations, possibly obligatory for non-command uses.

# Conclusion and challenges

- Imperatives, directive subjunctives, and infinitivals: encode modality.
- Modal operators license them in main clauses and can be:
  - Practical or expressive (morphosyntactic imperatives, Slovenian *naj*-subj.) vs. practical only (Romanian *să*-subj.; root infinitivals)
  - Propositional (morphosyntactic imperatives, root subjunctives) vs. property-embedding (root infinitivals)
- RIs can, but need not, encode certain aspects of participant relations, possibly obligatory for non-command uses.
- Many open questions. . .
  - How does this semantically motivated parameterization relate to the form side? ('compositional take')
  - Why aren't there covert epistemic operators or covert descriptive prioritizing modal operators?
  - How to understand the link between participant relations, modal particles, and speech act types?

# Conclusion and challenges

- Imperatives, directive subjunctives, and infinitivals: encode modality.
- Modal operators license them in main clauses and can be:
  - Practical or expressive (morphosyntactic imperatives, Slovenian *naj*-subj.) vs. practical only (Romanian *să*-subj.; root infinitivals)
  - Propositional (morphosyntactic imperatives, root subjunctives) vs. property-embedding (root infinitivals)
- RIs can, but need not, encode certain aspects of participant relations, possibly obligatory for non-command uses.
- Many open questions. . .
  - How does this semantically motivated parameterization relate to the form side? ('compositional take')
  - Why aren't there covert epistemic operators or covert descriptive prioritizing modal operators?
  - How to understand the link between participant relations, modal particles, and speech act types?

MANY THANKS!

For help with data and/or theory special thanks to: Despina Oikonomou (Greek), Jakob Lenardič, Adrian Stegovac (Slovenian), Donka Farkas, Simona Herdan, Daniela Isac (Romanian), Teruyuki Mizuno (Japanese), Marley Beaver (English), Fabio del Prete, Chiara Minoccheri (Italian); Stefan Kaufmann, Bill Lycan, the UConn Meaning Group, the audiences at *Agency and Intentionality in Language 2* and at the CUNY linguistics colloquium. This work was partially supported by NSF grant #2116972 "Research on conditional and modal language".

# References I

- Altmann, Hans. 1993. Satzmodus. In Jacobs, Joachim, Arnim von Stechow, Wolfgang Sternefeld, and Theo Venneman, editors, *Syntax. Ein internationales Handbuch der zeitgenössischen Forschung*, pages 1006–1029. de Gruyter, Berlin/New York. Teilweise bereits als Version von 1990 besprochen.
- Barker, Chris. 2010. Free choice permission as resource-sensitive reasoning. *Semantics and Pragmatics*, 3(10):1–38.
- Charlow, Nate. 2014. Logic and semantics for imperatives. *Journal of Philosophical Logic*, 43: 617–664.
- Condoravdi, Cleo and Sven Lauer. 2012. Imperatives: Meaning and illocutionary function. In Piñon, Christopher, editor, *Empirical Issues in Syntax and Semantics*, volume 9, pages 1–21.
- Crnič, Luka and Tue Trinh. 2009. Embedding imperatives in English. In Riester, Arndt and Torgrim Solstad, editors, *Proceedings of Sinn und Bedeutung 13*, pages 113–127. University of Stuttgart.
- Culicover, Peter W. and Ray Jackendoff. 1997. Semantic subordination despite syntactic coordination. *Linguistic Inquiry*, 28:195–217.
- Eckardt, Regine. 2011. Imperatives as future plans. In Reich, Ingo, editor, *Proceedings of Sinn und Bedeutung 2010*. Universität des Saarlandes.
- von Fintel, Kai and Sabine Iatridou. 2017. A modest proposal for the meaning of imperatives. In Arregui, Ana, Marisa Rivero, and Andrés Pablo Salanova, editors, *Modality Across Syntactic Categories*, pages 288–319. Oxford University Press, Oxford, UK.
- Francis, Naomi. t.a. Imperatives under *even*. In Baird, Maggie, Duygu Göksu, and Jonathan Pesetsky, editors, *Proceedings of the North East Linguistics Society (NELS) 49*, Amherst, MA. GLSA.
- Frank, Anette. 1996. *Context Dependence in Modal Constructions*. PhD thesis, University of Stuttgart.
- Fries, Norbert. 1983. *Syntaktische und semantische Studien zum frei verwendeten Infinitiv und zu verwandten Erscheinungen im Deutschen*. Studien zur deutschen Grammatik 21. Narr, Tübingen.

## References II

- Gärtner, Hans-Martin. 2013. In Altmann, XX, editor, *Satztypen*.
- Gärtner, Hans-Martin. 2014. On covert modality in German root infinitives. In *Proceedings from WCCFL*.
- Gärtner, Hans-Martin. 2017. Root infinitivals and modal particles. an interim report.
- Grosz, Patrick. 2009. German particles, modality, and the semantics of imperatives. In Lima, S, K Mullin, and B Smith, editors, *The Proceedings of NELS 39*, Amherst, MA. GLSA.
- Han, Chung-hye. 2000. *The structure and interpretation of imperatives: mood and force in universal grammar*. Outstanding Dissertations in Linguistics. Garland, New York.
- Harris, Daniel W. t.a. Imperative inference and practical rationality. *Philosophical Studies*.
- Hausser, Roland. 1980. Surface compositionality and the semantics of mood. In Searle, John, Ferenc Kiefer, and Manfred Bierwisch, editors, *Speech Act Theory and Pragmatics*, volume II, pages 71–95. Reidel, Dordrecht.
- Heim, Irene. 1977. *Zum Verhältnis von Wahrheitsbedingungen-Semantik und Sprechakttheorie*. Sonderforschungsbereich 99. Universität Konstanz.
- Huntley, M. 1984. The semantics of English imperatives. *Linguistics and Philosophy*, 7(2):103–133.
- Ihara, Shun. 2020. *Decomposing Directive Strategies*. PhD thesis, Osaka University.
- Isac, Daniela. 2015. *The Morphosyntax of Imperatives*. Oxford Studies in Theoretical Linguistics. Oxford University Press, Oxford.
- Kamp, Hans. 1973. Free choice permission. *Proceedings of the Aristotelian Society*, 74:57–74.
- Kaufmann, Magdalena. 2012. *Interpreting Imperatives*. Springer, Berlin.
- Kaufmann, Magdalena. 2018. Topics in conditional conjunctions. Invited talk at NELS 49, Cornell University.
- Kaufmann, Magdalena. 2019a. Fine-tuning natural language imperatives. *Journal of Logic and Computation*, 29(3). First published online, June 18, 2016.
- Kaufmann, Magdalena. 2019b. Who controls who (or what)? *Proceedings of SALT*, 29:636–664.

## References III

- Kaufmann, Magdalena. 2021. Imperatives. In Gutzmann, Daniel, Lisa Matthewson, Cécile Meier, Hotze Rullmann, and Thomas Ede Zimmermann, editors, *The Wiley Blackwell Companion to Semantics*, pages 1–42. John Wiley & Sons, Inc.
- Kaufmann, Magdalena and Stefan Kaufmann. 2012. Epistemic particles and performativity. In *Proceedings of Semantics and Linguistic Theory (SALT) 22*, pages 208–225.
- Kaufmann, Magdalena and Sanae Tamura. 2020. Japanese modality - possibility and necessity: prioritizing, epistemic, and dynamic. In Jacobsen, Wesley and Yukinori Takubo, editors, *The Handbook of Japanese Semantics and Pragmatics*. Moulton de Gruyter.
- Kratzer, Angelika. 1981. The notional category of modality. In Eikmeyer, Hans-Jürgen and Hannes Riesner, editors, *Words, Worlds, and Contexts*, pages 38–74. Walter de Gruyter.
- Kratzer, Angelika. 1991. Modality. In Stechow, Arnim von and Dieter Wunderlich, editors, *Semantik. Ein internationales Handbuch der zeitgenössischen Forschung*, pages 639–650. de Gruyter, Berlin/New York.
- Kratzer, Angelika. 2012. *Modals and Conditionals*. Oxford University Press.
- Krifka, Manfred. 2014. Embedding illocutionary acts. In Roeper, Tom and Margaret Speas, editors, *Recursion, Complexity in Cognition*, volume 43 of *Studies in Theoretical Psycholinguistics*, pages 125–155. Springer, Berlin.
- Lewis, David. 1979. A problem about permission. In Saarinen, E. and al., editors, *Essays in Honor of Jaakko Hintikka*. Reidel, Dordrecht. Manuscript from 1970.
- Lohnstein, Horst. 2000. *Satzmodus – kompositionell*. Akademie Verlag, Berlin.
- MacFarlane, John. 2014. *Assessment Sensitivity: Relative Truth and its Applications*. Oxford University Press.
- Mandelkern, Matthew. 2019. Practical moore sentences. *Nous*, 00:0:1–23.
- Mastop, Rosja. 2005. *What can you do?* PhD thesis, ILLC Amsterdam.
- Ninan, Dilip. 2005. Two puzzles about deontic necessity. In Gajewski, J, V Hacquard, B Nickel, and S Yalcin, editors, *New Work on Modality*, pages 149–178. MIT Working Papers in Linguistics, Cambridge, MA.



## References IV

- Oikonomou, Despina. 2016. *Covert modals in root contexts*. PhD thesis, MIT.
- Pak, Miok, Paul Portner, and Raffaella Zanuttini. 2022. Restrictions on indexicals in directive clauses. To appear in *Linguistic Inquiry*.
- Portner, Paul. 1997. The semantics of mood, complementation, and conversational force. *Natural Language Semantics*, 5:167–212.
- Portner, Paul. 2005. The semantics of imperatives within a theory of clause types. In Watanabe, Kazuha and Robert B. Young, editors, *Proceedings of SALT 14*. CLC Publications, New York.
- Portner, Paul. 2007. Imperatives and modals. *Natural Language Semantics*, 15:351–383.
- Portner, Paul. 2010. Permission and choice. In Grewendorf, Günther and Thomas Ede Zimmermann, editors, *Discourse and Grammar. From Sentence Types to Lexical Categories*, Studies in Generative Grammar. Mouton de Gruyter, Berlin.
- Portner, Paul. 2022. Speaking frankly. Talk at SPAGAD-lecture series, ZAS Berlin, February 18.
- Portner, Paul, Miok Pak, and Raffaella Zanuttini. 2019. The speaker-addressee relation at the syntax-semantics interface. *Language*, 95:1–35.
- Reis, Marga. 2003. On the form and interpretation of German wh-infinitives. *Journal of Germanic Linguistics*, 15:155–201.
- Roberts, Craige. 2015. Conditional plans and imperatives: a semantics and pragmatics for imperative mood. In *Proceedings of the 2015 Amsterdam Colloquium*.
- Rudin, Deniz. 2018. *Rising Above Commitment*. PhD thesis, University of California Santa Cruz, CA.
- Sadock, Jerrold M. and Arnold M. Zwicky. 1985. Speech act distinctions in syntax. In Shopen, T, editor, *Language Typology and Syntactic Description*, volume I, pages 155–196. Cambridge University Press, Cambridge.
- Schwager, Magdalena. 2006. *Interpreting Imperatives*. PhD thesis, University of Frankfurt.
- Segerberg, Krister. 1989. Bringing it about. *Journal of Philosophical Logic*, 18:327–347.
- Stalnaker, Robert. 1978. Assertion. In Cole, Peter, editor, *Syntax and Semantics 9*, pages 315–332. Academic Press, New York.

# References V

- Starr, Will. 2020. A preference semantics for imperatives. 13. *Semantics & Pragmatics*.
- Stegovec, Adrian. 2019. Perspectival control and obviation in directive clauses. *Natural Language Semantics*, 27(1):47–94.
- Stegovec, Adrian and Magdalena Kaufmann. 2015. Slovenian imperatives: You can't always embed what you want! In Csipak, Eva and Hedde Zeijlstra, editors, *Proceedings of Sinn und Bedeutung*, pages 621–638, Göttingen.
- Truckenbrodt, Hubert. 2006. On the semantic motivation of syntactic verb movement to C in German. *Theoretical Linguistics*, 32(3):257–306.
- Zanuttini, Raffaella. 2008. Encoding the addressee in the syntax: evidence from English imperative subjects. *Natural Language and Linguistic Theory*, 26(1):185–218.