



What do imperatives mean?

# Imperio!

- (1) Read it!
- (2) Lies es!
- (3) dhiavase to!

# Imperative = Command?

- Romance 'imperative' from Latin 'impero, imperare', "to command"
- Greek 'prostaktiki' from 'prostazo', "to command"
- Turkish 'emir kipi', "command" (noun)
- Slovenian 'velelnik' from 'veleti', "to command"
- Hebrew 'civuy' "to command"
- Albanian 'urdherore', from 'me urdheru' "to command"
- Arabic 'fi'l ?amr' "to command"

# Upshot

The meaning of imperatives:

Bring into existence an obligation on the part of the addressee to carry out the relevant action

# Model

The meaning of imperatives:

- a context change potential  
     $\rightsquigarrow$  a function from input contexts to output contexts

model of the context:

- to-do list
- permissibility sphere

# Read this book!

The meaning of “Read this book!” =

a function that maps any input context into one where the to-do list of the addressee contains the action read this book

# Are we there yet?

What else is there to do?

- Q<sub>1</sub> What are the morphosyntactic parts of imperatives?
- Q<sub>2</sub> How does the meaning of imperatives arise compositionally?
- Q<sub>3</sub> What is the division of labor between semantics and pragmatics?



# Some options

From semantic minimalism to full-blown dynamic semantics:

- simple property (read the book)
- addressee-restricted property (you read the book) Portner
- speaker attitude (it's my preference that you read the book)  
Magda Kaufmann, Condoravdi & Lauer
- CCP (add read the book to addressee's to-do list) Veltman etc.

# How to choose

## Accounts

- in the end deliver a command-force CCP as the meaning of imperatives
- differ in how much of that is encoded in the semantics of the imperative vs. the pragmatics

Are there ways to choose?  $\Rightarrow$  look at non-command uses of imperatives

# Permission

(4) A: May I open the door?

B: Sure, go ahead, **open the door!**

PERMISSION

⇒ The Problem of Functional Heterogeneity (Schmerling 1982)

# All kinds of non-command uses

- (5) A: Excuse me, I want to get to the station.  
B: Take a number 3 bus. ADVICE
- (6) Go on. Throw it. Just you dare. DARE
- (7) Get well soon. WISHES
- (8) a. Please don't rain  
b. Start, damn you. AUDIENCELESS
- (9) a. Please be out.  
b. Please don't have made things worse. PREDETERMINED

# IaDs

- (I0) Study hard and you will pass the class.
- (I1) Ignore your homework and you will fail the class.

**I**mperative **a**nd **D**eclarative

# Today's question

What can we learn about the meaning of imperatives from permission uses and IaDs?

# Cross-linguistic connection

If an imperative-like verb form can be used in laDs, it can also be used as a permission imperative.

not quite a biconditional

WHY?

Section I

Permission



# What is permission?

Descriptive:

- (12) A new law allows you to drive up to 85mph on some Texas highways.

Performative:

- (13) I hereby allow you to stay out with your friends until 10pm.

# The act of permission

- $\phi$  was forbidden
- S has the authority to change the rules
- S does something to change the rules
- $\rightsquigarrow \phi$  is now permitted

# Permission modals

Descriptive:

(14) You may drive up to 85mph on some Texas highways.

Performative:

(15) You may stay out with your friends until 10pm.

# Non-command imperatives

(16) Drive up to 85mph on some Texas highways!

hmm

(17) Stay out with your friends until 10pm tonight!

# The permission puzzle

How can it be that an expression that is used to impose an obligation can also be used to merely permit something?

# Strong meaning weakened in context?

- Expressing what the hearer wants      Wilson & Sperber, Kaufmann
- Commanding what the hearer wants      Condoravdi & Lauer
- Conflicting commands  $\rightsquigarrow$  permission      Portner

# Wilson & Sperber

IMP  $\phi$  = X considers  $\phi$  to be desirable to Y and to be a valid option

Command use: X = Y = Speaker

Permission use: X = Speaker, Y = Hearer

# Kaufmann

## IMP

- is a necessity modal with presuppositions that force it to be used performatively
- expresses that  $\phi$  is a necessity with respect to a deontic ordering source  $g$  and a modal base  $f$
- has an underspecified ordering source: “what the speaker commands” or “what the hearer wants”



# Condoravdi & Lauer

IMP  $\phi$  expresses

- that the speaker wants  $\phi$
- and that the expression of this want exhaust the speaker's plan to realize  $\phi$  (deriving performativity, we think)

[NB: their analysis is so far only available on handouts]

# An obvious problem

The weakening of strong meanings in context doesn't seem to happen with other expressions in the same semantic field:

- performative necessity modals
- desideratives (“I want you to”)
- “strong” imperative-like expressions

# Performative necessity modals

Performative necessity modals cannot be used to grant permission:

- (18) A: May I open the door?  
B: Sure, go ahead, open it!  
B': Sure, go ahead, #you must open it.  
B'': Yes, in fact: you must open it!  
C: Sure, go ahead, you should open it.
- (19) You must stay out until 10pm tonight!

# Desideratives

- (20) A: Can I go out and play?  
B: Okay, go out!  
B': Okay, I want you to go out.

# Strong command expressions

German:

- (21) Geh raus! imperative
- (22) Rausgehen! infinitive, expresses command

Permission?

- (23) A: Kann ich rausgehen und spielen?  
B: Na klar, geh raus! permission reading  
B': Na klar, rausgehen! no permission reading

# Indifference

- (24) Go left! Go right! Either way is fine with me.
- (25) #You must go left. You must go right. Either way is fine with me.
- (26) #I want you to go left. I want you to go right. I don't care.
  
- (27) Sure, open the window! I don't care.
- (28) #Sure, you should open the window. I don't care.

# Not necessarily what the hearer wants

Another problem for Wilson & Sperber, Kaufmann, Condoravdi & Lauer:

- one can give permission to  $\phi$  even if the hearer doesn't necessarily want  $\phi$
- permission imperatives can do that:

(29) Stay out with your friends until 10pm tonight!

(30) Order up to three accompaniments for free with any entree!

# The open door

It's not even true that a command that corresponds to what the hearer wants is thereby a permission:

(31) A: I want to write a novel.

B: So, write a fracking novel!

(exasperated life coach)

B': So, you must write a novel!



# Portner

- use of imperative adds a property to hearer's to-do list (TDL)
- the hearer should act so as to make as many items on the TDL true as feasible
- any contradictory items on the TDL  $\rightsquigarrow$  choice
- so, if  $\phi$  was previously forbidden ( $\neg\phi$  on the TDL), IMP  $\phi$  getting added to TDL amounts to giving a choice between  $\phi$  and  $\neg\phi$

# Problem for Portner

Imperatives that conflict with previously imposed obligations create conflict rather than choice:

(32) A to B: (at 6pm) Bring beer to the party tomorrow!

A to B: (at 8pm) Bring wine to the party tomorrow!

B to A: Could you make up your mind, please?

Portner's solution: marking imperatives for whether they create an obligation or a permission.

# ruhig vs. bloss

Patrick Grosz:

- (33)
- a. Iss \*bloss/ruhig den Spinat! Das stört mich nicht.  
eat bloss/ruhig the spinach that disturbs me not  
'Eat bloss/ruhig the spinach! That doesn't disturb me.'
  - b. Iss bloss/\*ruhig den Spinat! Sonst wirst du bestraft.  
eat bloss/ruhig the spinach or.else will.be you punished  
'Eat bloss/ruhig the spinach! Or else you'll be punished.'

# Lessons from permission use

- None of the “strong gets weak in context” approaches seem to work.
- Open options:
  - necessity/possibility ambiguity (Grosz)
  - “weak gets strong in context”
    - can permissions become commands in context?
  - underspecified meaning
    - à la Portner, but without the tight connection to strong dynamics

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(34) You may clear the table now.



- bare plurals
- modals in Salish (Rullmann et al.), Nez Perce (Deal)
- infinitival relatives:  $\left\{ \begin{array}{l} \text{the} \\ \text{a} \end{array} \right\}$  man to consult (Hackl & Nissenbaum)

BUT: IaDs !?

## Section 2

laDs

# IaDs

Type I: desirable first conjunct

(35) Study hard and you will pass the class.

Type II: undesirable or neutral first conjunct

(36) Ignore your homework and you will fail the class.

(37) Open the paper and you will find 5 mistakes on every page.



# Splitters

**Type I:** true imperative plus modally subordinated will

**Type II:** non-imperative bare verb form feeding a restriction to a modal

↪ If this works, then IaDs are not a problem for strong meanings

# (Almost) consensus on Type I

According to Kaufmann, Russell, and others, Type I IaDs work like this:

- they are conjunctions of speech acts (à la Krifka)
- their first conjunct is a true imperative
- their second conjunct is interpreted via modal subordination (à la Roberts)

# Sequencing: I.D and M.D

(38) a. Invest in this company! You will become rich. =

b. You  $\left\{ \begin{array}{l} \text{must} \\ \text{have to} \\ \text{should} \end{array} \right\}$  invest in this company!

You will become rich.

- (39)
- a. Speak to them in French! They will hire you. =
  - b. You must speak to them in French! They will hire you.

# Modal Subordination

will in the second conjunct is restricted to worlds where the prejacent of the imperative or necessity modal is satisfied.

- (40)
- a. You will become rich.  
= if you invest in this company, you will become rich.
  - b. They will hire you.  
= if you speak to them in French, they will hire you.

# The claim

- (41) Invest in this company and you will become rich. =
- (42) Invest in this company! (and)  
if you invest in this company, you will become rich.

# Problem I

Modal subordination is actually not possible across and!

(43) \*/?/?You  $\left\{ \begin{array}{l} \text{have to} \\ \text{must} \\ \text{should} \end{array} \right\}$  invest in this company

and you will become rich.

But then why is there putative modal subordination in Type I IaDs across and?

(44) Invest in this company and you will become rich.

(45) \*/??You { have to  
must  
should } speak to them in French  
and they will hire you immediately.

vs.

(46) Speak to them in French and they will hire you immediately.



## Problem 2

Modal subordination involves a pragmatic resolution of the understood restriction of a modal. This indirectness is most vivid in “polarity switch”:

- (47) Don't park there! You will be towed. =  
Don't park there! if you do, you will be towed.

No polarity switch in IaDs:

- (48) Don't park there and you will be towed. ≠  
Don't park there! if you do, you will be towed.

- (49) Conserve your energy! You will run out of breath. =  
Conserve your energy! If you don't, you will run out of breath.
- (50) Conserve your energy and you will run out of breath.  $\neq$   
Conserve your energy! If you don't, you will run out of breath

## Problem 3

Modal subordination (again b/c of its indirectness) allows mood choice:

(51) Read that book by Max.  $\left\{ \begin{array}{l} \text{If you do} \\ \text{If you did} \end{array} \right\}$ , you  $\left\{ \begin{array}{l} \text{will} \\ \text{would} \end{array} \right\}$  like it.

(52) You  $\left\{ \begin{array}{l} \text{have to} \\ \text{must} \\ \text{should} \end{array} \right\}$  read that book by Max.

$\left\{ \begin{array}{l} \text{If you do} \\ \text{If you did} \end{array} \right\}$ , you  $\left\{ \begin{array}{l} \text{will} \\ \text{would} \end{array} \right\}$  like it.

laDs do not allow mood choice:

(53) Study hard and you  $\left\{ \begin{array}{l} \text{will} \\ \text{*would} \end{array} \right\}$  pass the class.

Type I laDs do not involve a true imperative + modal subordination.

# Unified account?

So, maybe we should explore how Type II laDs work and try to subsume Type I laDs under them.

# Bolinger 1967 → Russell 2007

Bolinger:

(54) ([If] you) tell him anything, (and) he just looks at you blankly.

“there has been an aphasis of the initial if or if you, which produces something with all the appearance of an imperative and **accounts for those supposed conditional imperatives that least resemble commands**”

Russell: “the VPs in [laDs] are optionally non-imperative second person sentences”

# Jespersen 1924

“As the imperative has no particular ending in English, one might perhaps feel inclined to think that these sentences contained infinitives (though how used?). Parallel uses in other languages show us, however, clearly that they contain imperatives.”

- (55) Sage das, und du wirst verhöhnt.  
say:IMP that and you will.be heckled  
'Say that and you'll be heckled.'

# Greek IaDs

- (56) Kane ta mathimata su ke ola tha pane kale  
do.IMP the lessons your and all FUT go well
- (57) Fae ena apo afta ke tha pethanis mesa se 24 ores  
Eat.IMP one from these and FUT die within 24 hours  
'Eat one of these and you will die within 24 hours'
- (58) Anikse tin efimeridha ke tha vris 5 lathi se kathe  
Open.IMP the paper and FUT find 5 mistakes on every  
selidha  
page



# Unified account?

Han:

- imperative is stripped of [directive] feature in both types
- simply serves as a conditional antecedent for the second conjunct
- pragmatics predicts whether first conjunct is perceived as desired/commanded or contra-indicated or neutral

# Deducing force

- (59) If you study hard, you will succeed.
- (60) If you goof off, you will fail.

# Marking positive force

- (61) Studiere bloss fleissig und der Test wird ganz einfach.  
study:IMP bloss busily and the test becomes totally easy

# A couple of mysterious markers in English

Type I IaDs (but not Type II) allow do-emphasis and quantified subjects (Russell, Scontras & Gibson):

- (62) a. Do study hard and you will succeed.  
b. \*Do ignore your homework and you will fail.
- (63) a. Nobody goof off and all will go well.  
b. \*Nobody work hard and all will be lost.

# Not command markers

NB: do-emphasis and quantified subjects might be markers of desirability (and thus infelicitous in Type II IaDs with undesirable consequents) but they are not command markers. They seem fine in permission uses (?):

- (64) A: Can I open the window?  
B: Sure, go ahead, do open it!
- (65) A: Can we sit down?  
B: Sure, go ahead, everyone sit down!

# Distinguish desirability markers

- strong imperative meaning
- underspecified at-issue meaning + second dimension marker of desirability

# Strong imperatives

Our language sample contains imperative-like constructions that seem to express strong meanings (command only?). For example, Hebrew can use the future or the infinitive to convey commands:

(66) la-shevet!  
INF-sit  
'Sit!'

(67) te-xabek            ot-o!  
FUT.2-hug(sg.M) ACC-3sg.M  
'Hug him!'

Only the future can have permission readings. Only the future occurs in any type of laDs.

# Interim summary of our survey

- Some imperative-like constructions (Hebrew and Catalan infinitives, Slovenian subjunctives) can only be used in commands (not in permission, not in laDs).
- Mostly, anything that can be used in permission can also be used in laDs, and vice versa.
- One case of a construction that can express permission but cannot be used in laDs: Palestinian Arabic negated present imperfectives.
- In most cases, imperative-like constructions that can appear in laDs can be used in both Type I and Type II laDs, bolstering the case for a unified account.



# Catalan negated subjunctives

- (68) No dormis!  
Not sleep-subj  
'Don't sleep'

This can express permission ("Mama, I don't want to sleep yet, is that OK?"). OK in Type I laDs but not in Type II:

- (69) No vagis a fisioteràpia i t'estalviaràs diners  
don't go to physiotherapy and you will save money
- (70) ??/\*No vagis a fisioteràpia i quedaràs coix  
don't go to physiotherapy and you will stay crippled

So, this is a case of a morphological verb form that seems to carry (mild) desirability (but not command) in its meaning (cf. English do).

# Conclusion

- Imperatives have uses with no trace of a command meaning
- This favors semantic minimalism (à la Portner)

# TDL

- Explain context dynamics of stand-alone imperatives (command vs. permission, etc.)
- Explain the composition of IaDs
- Explain the semantics of desirability markers

Are there un-desirability markers?

# Imperative Puzzles

Kai von Fintel  
(work in progress with Sabine Iatridou)

Yale “Current Work in Cognitive Science”  
February 7, 2011

## Section 3

Bonus: The composition of IaDs

# How do IaDs work?

- **How** does the first conjunct become the antecedent of a conditional claim?
- **Where** does the rest of the conditional meaning come from: especially the main operator?

# LSand

Culicover & Jackendoff (1997):

- standard coordinating and
- left sub-ordinating and, a.k.a. LSand:

(71) One more can of beer and I'm leaving.

(72) You drink another can of beer and I'm leaving.

(73) Big Louie sees you with the loot and he puts out a contract on you.

# Properties of LSand

- (74) Another picture of himself (appears) in the paper LSand Susan thinks that John will definitely go out and get a lawyer.
- (75) You give him enough opportunity LSand every senator, no matter how honest, will succumb to corruption.
- (76) a. You know, of course, that you drink one more beer and you get kicked out.  $\neq$   
b. You know, of course, that you drink one more beer and that you get kicked out.
- (77) !!Big Louie sees you with the loot and puts out a contract on you.



# Turkish

In our initial sample of languages (13 mediterranean languages + English, German), only Turkish does not have LSand-constructions:

- (78) ??/\*Bir hata daha ve sen -i iş -in -den  
one mistake more and you (sg.)-acc work-2.sg.poss.-abl.  
at -ar -lm  
throw-aor.-I.sg  
'one more mistake and I'll fire you from your job'
- (79) \*kadın-lar-a gülümse-me -si yeter ve hemen  
woman-pl-dat smile-'ing'-3.sg.poss sufficient and immediately  
kendisin -e tut -ul -ur-lar  
3.sg-dat capture-(impers.) pass.-aor.-3.pl.  
int.: 'It's enough for him to smile at women and they  
immediately fall for him'

And only Turkish does not have laDs (of either type)!

# Understanding LSand

In LSand-constructions, a conditional meaning comes about. But how?

- Kaufmann: in laDs, the imperative modal in the **first** conjunct takes scope over the entire construction and is restricted by the remaining material in the first conjunct
- Keshet: in LSand-constructions, the modal in the **second** conjunct takes scope over the entire construction and is restricted by the material in the first conjunct

# Problem for Kaufmann

(80) \*/??You  $\left\{ \begin{array}{l} \text{have to} \\ \text{must} \\ \text{should} \end{array} \right\}$  invest in this company

and you will become rich.

(81) \*/??You  $\left\{ \begin{array}{l} \text{have to} \\ \text{must} \\ \text{should} \end{array} \right\}$  ignore your homework

and you will fail the class.

There are other problems ...

# A severe challenge for LSand-analyses

von Fintel & Iatridou 2007:

- (82) You only have to go to the North End and you will get good cheese.

# Another desideratum

- (83) You only have to go to the Stata Center and you will find out what Morris is working on.

Bolinger: “intrinsic consequence”

- (84) a. Like her and her friends will love you.  
b. \*Like her and I'll introduce her to you.
- (85) a. Own a piece of property and you get taxed mercilessly.  
b. \*Own this property and I'll buy it from you

# To do list

- Need a unified analysis of all laDs (since the obvious special analysis of Type I laDs is incorrect)
- Assimilate laDs to LSand-constructions in general
- Give a compositional analysis of LSand and all its distinctive properties
- Necessary ingredient (it seems): a meaning for imperatives stripped of directivity

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# Excursus:

## Advertising Imperatives

Davies 1986, p.43:

- (86) Win up to £1000 in this week's competition!
- (87) Pass G.C.E. in any subject you like.
- (88) Speak a new language after as little as eight weeks.

“[T]he perlocutionary intent of the authors of such imperatives is usually to get the public to use their products or services in order to realise the possibility referred to; but the utterances themselves do not seem to have the force of any kind of directive. Rather than constituting expressions of an intention that people should do something, they could be said to have an informative function, merely indicating that something can be done.”



# Greek advertising imperatives

- (89) parigile eos tria periodika dorean  
order-IMP up-to 3 magazines for-free  
'Order up to 3 magazines for free!'
- (90) odigise pano apo 65 milia tin ora se merikus dromus  
drive-IMP above from 65 miles the hour on some streets  
'Drive over 65 miles per hour on some streets!'
- (91) kerdise pano apo ekato ekatomiria dolaria  
win-IMP over from 100 million dollars  
'Win over 100 million dollars!'

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