Imperative Puzzles

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Section 1

Introduction
Imperio!

(1) Read it!
(2) Lies es!
(3) dhiavase to!
Imperative = Command?

Certainly whoever coined grammatical terminology thought so:

- 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”
Temptation

- Posit IMP functional head
- Attribute a strong command meaning to it
(4) Open the door! ≈ You must open the door!
First fly in the ointment

(5) A: May I open the door?
B: Sure, go ahead, open the door! 

⇒ The Problem of Functional Heterogeneity (Schmerling 1982)
All kinds of non-command uses

(6) A: Excuse me, I want to get to the station.  
B: Take a number 3 bus.  


(8) Get well soon.  

(9) a. Please don’t rain  
    b. Start, damn you.  

(10) a. Please be out.  
     b. Please don’t have made things worse.
(11) Study hard and you will pass the class.
(12) Ignore your homework and you will fail the class.

**Imperative and Declarative**
Today’s question

What can we learn about the meaning of imperatives from

1. permission uses and
2. laDs

?
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?
Choicepoints

• how much meaning in the semantics vs. pragmatics?
• how rich is the initial semantics?
  modal proposition vs. propositional radical
• how central is the dynamics?
  imposing requirements, opening up options
• what is the structure that is being affected?
  to do list, spheres of permissibility, …
• how much ambiguity/underspecification is there?
Theories we’ll be testing

“There are two main approaches to the semantics of imperatives: the modal theory and the dynamic theory.” (Portner)

1. modal propositions
   - Wilson & Sperber
   - Schwager

2. dynamics
   - Han
   - Portner
   - Condoravdi & Lauer

…many others!
Section 2

Permission
What is permission?

Descriptive:

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

Performative:

(14) 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
- $\leadsto \phi$ is now permitted
Permission modals

Descriptive:

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

Performative:

(16) You may stay out with your friends until 10pm.
Non-command imperatives

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

(18) 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?
Performative necessity modals cannot be used to grant permission:

(19) 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.

(20) You must stay out until 10pm tonight!
Indifference

(21) Go left! Go right! Either way is fine with me.

(22) #You must go left. You must go right. Either way is fine with me.
Two ideas

1. IMP has a weak meaning
2. IMP has a strong meaning that in context can be weakened
Some options

1. weak meaning
   - Ambiguity ($\text{IMP} \Box$ and $\text{IMP} \Diamond$)
   - Unambiguously weak meaning?

2. strong meaning gets weak in context
   - Underspecification + context
   - Conflicting commands $\rightsquigarrow$ permission
   - Commanding what a hearer wants

Grosz
à la Salish modals?

Wilson & Sperber, Schwager
Portner
Condoravdi & Lauer
ruhig vs. bloss

(23)  
a. *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. 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.’
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
IMP is a necessity modal with presuppositions that force it to be used performatively.

It expresses that $\phi$ is a necessity with respect to a deontic ordering source $g$ and a modal base $f$.

Underspecification: “what the speaker commands” or “what the hearer wants”
Not necessarily what the hearer wants

Problem for Wilson & Sperber, Schwager, Condoravdi & Lauer:

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

(24) Stay out with your friends until 10pm tonight!
(25) 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:

(26)    A: I want to write a novel.
    B: So, write a novel! (exasperated life coach)
• use of imperative adds a property to hearer’s TO DO LIST
• 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:

(27)  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.
Imperatives can be really weak

(28) Stay out with your friends until 10pm tonight!
(29) Drive up to 85mph on some Texas highways!
(30) Order up to three accompaniments for free with any entree!
(31) Try PowerSuperBall! Win more than 100 million dollars!
Really weak Greek

(32) *parigile* eos *tria periodika* dorean
order-IMP up-to 3 magazines for-free
‘Order up to 3 magazines for free!’

(33) *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!’

(34) *kerdise* *pano apo* ekato *ekatomiria dolaria*
win-IMP over from 100 million dollars
‘Win over 100 million dollars!’
Section 3

IaDs
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
(Almost) consensus on Type I

According to Schwager, 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)  
\begin{align*}
\text{a.} & \quad \text{Invest in this company! You will become rich.} = \text{must} \\
\text{b.} & \quad \text{You} \begin{cases} \text{have to} \\ \text{should} \end{cases} \text{invest in this company. You will become rich.}
\end{align*}

(39)  
\begin{align*}
\text{a.} & \quad \text{Speak to them in French. They will hire you.} = \text{must} \\
\text{b.} & \quad \text{You must speak to them in French. They will hire you.}
\end{align*}
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.
Modal subordination is actually not possible across *and*!

\[(43)\] \(\star/??\) \(\text{You}\) \(\{\begin{array}{l}
  \text{have to} \\
  \text{must} \\
  \text{should}
\end{array}\}\) \(\text{invest in this company}\)

\(\text{and you will become rich.}\)

\[(44)\] \(\star/??\) \(\text{You}\) \(\{\begin{array}{l}
  \text{have to} \\
  \text{must} \\
  \text{should}
\end{array}\}\) \(\text{speak to them in French}\)

\(\text{and they will hire you immediately.}\)
Problem 2

No polarity switch in IaDs:

(45) Don’t park there! You will be towed. =
    Don’t park there! if you do, you will be towed.

(46) Don’t park there and you will be towed. ≠
    Don’t park there! if you do, you will be towed.
(47) Conserve your energy. You will run out of breath. =
    Conserve your energy. If you don’t, you will run out of breath.
(48) Conserve your energy and you will run out of breath. ≠
    Conserve your energy. If you don’t, you will run out of breath
Problem 3

No mood choice in second conjunct:

(49) Read that book by Max. You \{ will \ \textit{would} \} like it.

(50) You \{ have to \ \textit{must} \ \textit{should} \} read that book by Max.

(51) Study hard and you \{ will \textit{*would} \} pass the class.
Type I IaDs do not involve a true imperative + modal subordination.
Unified account?

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

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

“there has been an aphesis 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”
“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.”

(53) Sage *das, und du wirst verhöhnt.*
    say:IMP that and you will.be heckled
    ‘Say that and you’ll be heckled.’
Greek laDs

(54) Kane ta mathimata su ke ola tha pane kale do.IMP the lessons your and all FUT go well

(55) 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’

(56) 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
Questions

• 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?
Culicover & Jackendoff (1997):

- standard coordinating *and*
- left sub-ordinating *and*, a.k.a. \textsubscript{LS}\textsubscript{and}:

(57) One more can of beer and I’m leaving.
(58) You drink another can of beer and I’m leaving.
(59) Big Louie sees you with the loot and he puts out a contract on you.
Properties of $LS$ and $and$

(60) Another picture of himself (appears) in the paper $LS$ and $and$ Susan thinks that John will definitely go out and get a lawyer.

(61) You give him enough opportunity $LS$ and $and$ every senator, no matter how honest, will succumb to corruption.

(62) 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.

(63) !!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 \underline{LS} and-\underline{constructions}:

(64) \[/*\text{Bir hata daha ve sen-i iS-in-den} \]
\[\text{one mistake more and you (sg.)-acc work-2.sg.poss.-abl.} \]
\[at -ar -Im \]
\[\text{throw-aor.-1.sg} \]
\[\text{‘one more mistake and I’ll fire you from your job’} \]

(65) \[/*\text{kadın-lar-a güülümse-me -si yeter ve hemen} \]
\[\text{woman-pl-dat smile-‘ing’-3.sg.poss sufficient and immediately} \]
\[\text{kendisin -e tut -ul -ur-lar} \]
\[\text{3.sg-dat capture-(impers.) pass.-aor.-3.pl.} \]
\[\text{int.: ‘It’s enough for him to smile at women and they immediately fall for him’} \]

And only Turkish does not have IaDs (of either type)!
In \textit{\texttt{LS} and}-constructions, a conditional meaning comes about. But how?

- Schwager: in \textit{IaDs}, the imperative modal in the \textit{first} conjunct takes scope over the entire construction and is restricted by the remaining material in the first conjunct

- Keshet: in \textit{\texttt{LS} and}-constructions, the modal in the \textit{second} conjunct takes scope over the entire construction and is restricted by the material in the first conjunct
A severe challenge for \(\text{LS} and\)-analyses

von Fintel & Iatridou 2007:

(66) You only have to go to the North End and you will get good cheese.
Another desideratum

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

Bolinger: “intrinsic consequence”

(68) a. Like her and her friends will love you.
b. *Like her and I’ll introduce her to you.

(69) 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 IaDs (since the obvious special analysis of Type I IaDs is incorrect)
• Assimilate IaDs to $LS_{\text{and}}$-constructions in general
• Give a compositional analysis of $LS_{\text{and}}$ and all its distinctive properties
• Necessary ingredient: a meaning for imperatives stripped of directivity
Russell had given some evidence that the two types of IaDs are in fact distinct. Scontras & Gibson verified some of his claims in experimental studies.

(70) a. Do study hard and you will succeed.
    b. *Do ignore your homework and you will fail.

(71) a. Nobody goof off and all will go well.
    b. *Nobody work hard and all will be lost.
Our hunch

Given that the imperative + modal subordination analysis for Type I IaDs doesn’t seem to work, we need some other explanation for any markers that can occur with the imperative that force a Type I understanding (first conjunct desired).

(72) Study hard, which is what I want you to do, and you’ll pass with flying colors.

Markers of desirability that are not part of the dimension of meaning that LS\textit{and} operates on.
Our language sample contains imperative-like constructions that seem to express strong meanings (command only?). Hebrew can use the future or the infinitive to convey commands:

(73) \textit{la-shevet!}  
\begin{tabular}{l}
INF-sit \\
‘Sit!’
\end{tabular}

(74) \textit{te-xabek} \textit{ot-0!}  
\begin{tabular}{l}
FUT.2-hug(sg.M) ACC-3sg.M \\
‘Hug him!’
\end{tabular}

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 IaDs).
• Mostly, anything that can be used in permission can also be used in IaDs, and vice versa.
• One case of a construction that can express permission but cannot be used in IaDs: Palestinian Arabic negated present imperfectives.
The toughest case

Catalan negated subjunctives:

(75) No dormis!
Not sleep-subj
‘Don’t sleep’

This can express permission (“Mama, I don’t want to sleep yet, is that OK?”). It cannot be used in Type II IaDs but it can be used in Type I IaDs:

(76) No vagis a fisioteràpia i t’estalviaràs diners
don’t go to physiotherapy and you will save money

(77) ??/No vagis a fisioteràpia i quedaràs coix
don’t go to physiotherapy and you will stay crippled
Section 4

The End
A vision

• At the most barebones semantic level, canonical imperatives have a barebones non-modal meaning that can feed \( \text{LS}_\text{and} \)-constructions.

• They can be strengthened to permission and to command readings by additional processes (pragmatic? conventionalized? can be indicated by markers like \textit{ruhig/bloss}).

• Theories like Portner and Condoravdi & Lauer have the right shape, but we’re not on board with many of their details.
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