A modest proposal for the meaning of imperatives

Kai von Fintel (joint work with Sabine Iatridou)

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What do imperatives mean?

imperative = a verb form that is typically used to convey directive force, and is not typically used in subordinate roles (distinct from infinitives & subjunctives; but see later)

The obvious answer

Imperatives are used to impose an obligation on the addressee to make the prejacent of the imperative true:

(1)   Read this book!

$\Rightarrow$ If the imperative is successful the addressee now has the obligation to read this book.

- Romance 'imperative' from Latin '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 ʔamr', "to command"

- What is the morpho-syntax of imperatives?
- How does the meaning of imperatives arise compositionally?
- What is the division of labor between semantics and pragmatics?

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Models of the effect of imperatives

Imperatives, used successfully, affect a component of the context:

- To Do Lists (TDLs) a.k.a. plan sets
- permissibility spheres
- effective preference structures

From semantic minimalism to full-blown dynamic semantics

The less of the directive, context-affecting force is built into the denotational semantics of imperatives, the more needs to be done at the pragmatic level.

- simple property (*read the book*)
- addressee-restricted property (*you read the book*)
- modal proposition (*you should read the book*)
- speaker attitude (*it's my preference that you read the book*)
- CCP (add *read the book* to addressee's to-do list)

Portner (2007)

- minimal semantics (λx: x is the addressee. x reads the book)
- regulated pragmatics:
    - propositions $\Rightarrow$ (proposal to) add to common ground
    - questions $\Rightarrow$ (proposal to) add to QUD-stack
    - properties $\Rightarrow$ (proposal to) add to TDL

Kaufmann (2012)

- modal semantics
  - ≈ *you should read this book*
  - but with special presuppositions that ensure imperatives are not used as statements of what's required

Condoravdi & Lauer (2012)

- imperatives convey speaker's effective preference
- agnostic whether this comes from the semantics or "later" from the pragmatics

How to choose

Accounts:

- in the end deliver a command-force 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? And why haven't we reached consensus yet?

"our account is compatible with several options for the denotational meaning of imperatives, illustrating that the question 'What do imperatives denote?' is not a crucial one."

"the crucial/interesting semantic question about imperatives is not 'What do they denote?', but rather 'What is their dynamic effect?' … it might well be that there is no fact of the matter about what the denotation of imperatives is"

"The situation is different for declaratives and interrogatives because they can be embedded in various environments, which places additional constraints on their semantic types. Since imperatives can only embed in a rather limited manner, there are fewer such constraints."

Condoravdi & Lauer

Plan for today

Use two kinds of uses of imperatives to argue for a weak (non-modal, non-attitude) *denotational semantics*

- acquiescence & indifference
- imperatives in conditional conjunctions

Acquiescence

(2) A: It's getting warm. Can I open the window?
     B: Sure. Go ahead. Open it!

Indifference

(3) Go left! Go right! I don't care.

These weak readings are cross-linguistically common. We have found them in all of the Mediterranean and Western European languages that we've surveyed.

The strong gets weak in context

How does a strong semantics for imperatives deal with acquiescence readings?

- Something in the context interacts with the semantics to weaken its force.

Some possible factors:

- hearer is presupposed to desire *p*
- there's a standing prohibition against *p*
- implicit conditionalization (*if you like*)

Why not all the time?

The main problem with all these stories:

No other strong directives/desideratives/deontics get weakened this way!

Performative necessity modals cannot be used to grant permission:

(4) 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.

Desideratives:

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

Lest you think that this difference in the availability of acquiescence readings is due to a difference between explicitly strong directives and the almost covert nature of imperative marking …

Many languages have "backup directives", forms that are often used when an imperative cannot occur (under negation, for example) but that also sometimes have unembedded standalone uses as directives. Examples: infinitives, participles, subjunctives.

Cross-linguistically, some backup directives can only be used as strong directives, others have both strong and acquiescence readings.

Hebrew

(6) la-   shevet!
    INF- sit

    'Sit!' (command only)

(7) te-   xabek   ot-   o!
    FUT.2- hug(sg.M) ACC- 3sg.M

    'Hug him! (command, acquiescence)

German

(8) Geh raus!   imperative

(9) Rausgehen!   infinitive, expresses command

Acquiescence?

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

Indifference

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

(12) #You must go left. You must go right. Either way is fine with me.

(13) #I want you to go left. I want you to go right. I don't care.

(14)   Sure, open the window! I don't care.

(15) #Sure, you should open the window. I don't care.

Conclusion from acquiescence & indifference uses

- imperatives (and a few of their "backup" cousins) are unique among apparently strong directives in allowing weak acquiescence & indifference uses
- this would be unexpected if they had a strong directive *semantics*

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

Other ∃/∀ ambiguities

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

ruhig vs. *bloß*

Grosz:

(16) 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.'

The weak get strong

(17)   a.   You may leave now.

        b.   You may serve salmon in almond crust for dinner tomorrow.

        c.   You could shut up now.

Left and right

There's a serious problem for the idea that imperatives can have a weak/possibility reading:

(18) a. Go left! Go right! I don't care.

   b. You could go left. You could go right. I don't care.

(19) a. #Go left and go right! I don't care.

   b. You could go left and you could go right. I don't care.

If the imperative had an $\exists$-reading, why would the conjunction of contradictory imperatives not be possible?

Interim conclusion

- Strong directive *semantics* is in trouble.
- Even ambiguity stories are in trouble.
- A Portner-style barebones semantics looks better and better.
- But we would need to explain how it can get mapped to both strong and weak readings (depending on context & clues).

Imperatives in certain conjunctions

IaDs

Imperative **a**nd **D**eclarative

(20) a. Study hard and you will pass the class.

      b. Ignore your homework and you will fail this class.

      c. Open the paper and you will find 5 mistakes on every page.

Clear distinction between two kinds of readings:

- endorsing IaDs (*e-IaDs*) vs. non-endorsing IaDs (*n-IaDs*)

IaDs are very common

Greek:

(21)   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'

Palestinian Arabic:

(22)   Ilmis-ha   w   b-tindam   tool 'omr-ak
       touchIMP-it and b-regret.2sgm   all   life-your

       'Touch it and you will regret it the rest of your life'

French:

(23) ignore tes   devoirs   et tu échoueras
      ignore your homework and you fail-FUT

'Ignore your homework and you will fail'

Albanian:

(24) haje kete dhe do te vdesesh brenda 24 oresh
      eat   this and you will die   within   24 hours

'Eat this and you will die within 24 hours'

An exception: Turkish

(25) ??/*Cok CallS   ve baSarI-ll   ol-ur -sun!
     much work (imp.) and success-with be-aor -2.sg

    'Study hard and you'll succeed'

(26) ??/*Ev   Odev-in   -i   unut   ve baSarI -slz
     home work-2.sg.poss -acc. forget (imp.) and success -without

    ol-ur-sun!
    be-aor.-2.sg

    'Ignore your homework and you will fail'

Possible structural analyses

Type I true imperative + modal subordination

Type II purely conditional analysis (conditional conjunction)

The plot gets convoluted

- Excursus (somewhat inconclusive but fun):

  - e-IaDs might be analyzable as Type I (imperative + modal subordination)
  - but we have reason to suspect that they are not
    - including some striking facts about conjunction

- n-IaDs have to be cases of Type II (conditional conjunction)

  - how does conditional conjunction work?
  - n-IaDs are tractable only if imperatives have a minimal, non-modal semantics

- What's left to do, some ideas
- The End

Begin of inconclusive but fun excursus on e-IaDs

Type I analysis for e-IaDs

Tempting. Modal subordination is clearly in the air:

(27) Invest in this company! You will become rich.

(28) A wolf might walk in. It would eat us both.

(29) He might invest in this company. He will become rich.

(30) You $\left\{ \begin{array}{l} \text{must} \\ \text{have to} \\ \text{should} \end{array} \right\}$ invest in this company! You will become rich.

Subordination across conjunction?

Modal subordination is sometimes fine across conjunction:

(31)   [Let me tell you why we shouldn't open the door]
         A wolf might walk in and it would eat us both.

So, the idea is that e-IaDs are a true imperative conjoined with a
will-statement that is interpreted in modal subordination to the
prejacent of the imperative:

(32)   Invest in this company! and (if you do), you will become rich.

But …

Again, imperatives differ strangely from strong deontic etc. expressions.

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

(34)   ??You $\left\{ \begin{array}{l} \text{must} \\ \text{have to} \\ \text{should} \end{array} \right\}$ invest in this company and you will become rich.

(35)   ??I want you to invest in this company and you will become rich.

Constraints on conjunction

Bar-Lev & Palacas (1980), Txurruka (2003):

(36) a. Max fell; he broke his arm.

      b. = Max fell and he broke his arm.

(37) a. Max fell; he slipped on a banana peel.

      b. ≠ Max fell, and he slipped on a banana peel.

and does not allow a (reverse) EXPLANATION relation between the two conjuncts.

and does not allow a JUSTIFICATION relation, either:

(38) a. You should do the Atkins diet. It comes highly recommended.

   b. $\neq$ You should do the Atkins diet and it comes highly recommended.

(39) a. You should do the Atkins diet. You will lose a lot of weight.

   b. $\neq$ You should do the Atkins diet and you will lose a lot of weight.

(40) a. #Do the Atkins diet and it comes highly recommended.

   b. Do the Atkins diet and you will lose a lot of weight.

Again, *IMP* does not behave like clear directives!

Turkish, again

Turkish does have conjunctions in modal subordination:

(41) kapıda   bir kurt olabilir   ve   Allah korusun hepimiz yer
      door.loc a   wolf might.be and God   forbid   all.of.us eat.aor

'A wolf might be at the door and God forbid it would eat all of us'

So, the fact that Turkish doesn't have IaDs (even e-IaDs) would be puzzling if e-IaDs were cases of modal subordination.

No modal subordination in IaDs

Conclusion: Even e-IaDs are conditional conjunctions

We tentatively conclude that all IaDs, even endorsing ones, involve conditional conjunction, rather than having a true imperative speech act followed by modal subordination across standard *and*.

There are recalcitrant facts (possible force markers in first conjunct of e-IaDs). But shush! …

End of excursus on e-laDs

The death knell for strong imperative semantics

n-IaDs:

(42)   Ignore your homework and you will fail this class.

Clearly, not a directive speech act in the first conjunct, followed by a modally subordinated *will*.

Instead: an instance of a more general phenomenon, *conditional conjunctions*.

Conditional Conjunctions (CCs)

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

(44)   You drink one more beer and I'm out of here.

(45)   One more beer and I'm out of here.

Culicover & Jackendoff (1997)

CCs cross-linguistically

Greek

(46) O   skilos mu akui keravnus ke krivete kato apo to trapezi
      the dog   my hears thunder and hides   under   the table

      'My dog hears thunder and hides under the table'

(47) Ena lathos akoma ke tha se apoliso
      One mistake more and will you fire

      'One more mistake and I will fire you'

Palestinian Arabic

(48) Bet-talla'   fee-ha w   be-hmarr   wejh-o
      b-look.3sgm in-her and b-redden3sgm face-his

      'He looks at her and his face reddens'

(49) Kamaan   ghaltah   w   betorr-o-ok
      Another mistake and b-fire.3-pl-you

French

(50) il voit son patron et il s'enerve
he sees his boss and he gets nervous

(51) une biere de plus et nous vous expulserons
one beer more and we you fire

'One more beer and we will fire you'

Albanian

(52) Mesuesi e-cl shikon   dhe ai fshihet nen   tavoline
The teacher looks at him and he hides   under table-the

(53) nje gabim   dhe do te te pushoj (nga   puna)
one mistake and fut you fire   (from work)

'One mistake and I will fire you'

An exception, again

Turkish

(54) *kadln-lar-a   gülümse-me -si   yeter   ve
       woman-pl-dat   smile   -'ing'-3.sg.poss   sufficient   and

    hemen   kendisin   -e   tut
    immediately   he (logophoric pronoun, 3.sg)   -dat   capture

    -ul   -ur-   lar
    -(impers.) pass   -aor   -3.pl.

    int.: 'It's enough for him to smile at women and they immediately
    fall for him'

(55) ??/*Bir hata   daha ve sen   -i   iS   -in   -den
     one mistake more and you (sg.) -acc work -2.sg.poss -abl.
        at   -ar   -lm
        throw -aor. -1.sg

     'one more mistake and I'll fire you from your job'

If all IaDs are conditional conjunctions, then the absence of CCs in
general in Turkish subsumes the absence of IaDs.

Obviously, we'd like to know why Turkish doesn't have CCs.

Another plot clarification

- At least n-IaDs, but maybe all IaDs, are conditional conjunctions (CCs).
- How do CCs work?
  - some basic facts about CCs
  - either special kind of *and* or modal scoping over normal *and*
  - in either case, no modal in first conjunct!
- IaDs are explainable as special cases of conditional conjunctions if and only if imperatives have a minimal, non-modal semantics.

The readings of CCs

One case vs. multi-case

(56) John leaves his house before doing his homework, and he's grounded.

- one case: tonight
- multi-case: house rule

No epistemic reading

(57) John is not here and he's at home.
      $\neq$ If John is not here, he's at home.

Counterfactual

(58) a. One more beer and I would have fired you.

    b. *You had drunk one more beer and I would have fired you.

    c. *Drink one more beer and I would have fired you.

No factual Conditionals

(59) ?? You're so smart and you should do it yourself.

No biscuits

(60) !! You're hungry and there's biscuits on the sideboard.

Proposals like Franke's that derive biscuit readings pragmatically via ordinary conditional meanings may have a problem here. Or maybe this shows that conditional conjunction encodes more "true conditionality" than standard conditionals.

The big questions

How does conditional conjunction work?

- a special meaning for *and* or
- a modal operator taking scope over a standard conjunction, which is semantically partitioned to supply restriction and scope

What explains the cross-linguistic data?

- widespread conditional conjunction
- a few exceptions

What explains the limited set of conditional meanings?

$_{LS}$*and*

Culicover & Jackendoff (1997):

- conjunction *and* transformed at "Conceptual Structure" into a left-subordinating conditional connective

Klinedinst & Rothschild (2012):

- $_{LS}$*and* is like regular *and* in that the first conjunct dynamically updates a modal parameter that the second conjunct can be relative to
- $_{LS}$*and* is different in that its first conjunct is not asserted/entailed
- for bare conditionals: need Kratzer's covert modals in the second conjunct

The alternative

Conditional conjunction is a case of internal partition:

- a modal takes wide scope over conjunction
- focus structure determines that first conjunct restricts and second conjunct becomes the "consequent"

In principle, this should be the null hypothesis.

Keshet (2012)

(61)   You come on time and you get a good seat.

- covert *FUT* (for one-case) or *GEN* (for multi-case)
- first conjunct deaccented/given ⤳ restrictor
- second conjunct focused ⤳ scope

(62) John usually shaves [after he takes a SHOWER]$_F$

(63) John usually [SHAVES]$_F$ after he takes a shower.

Exceptionally some operators can take wide scope from the second conjunct:

(64)   You come on time and you sometimes get a good seat.

(65)   You work hard for the next month and you might get a raise.

Some worries

(66) You come on time tonight and you get a good seat.

(67) FUT: You come on time tonight and you get a good seat.

Does the focus-sensitive covert *FUT* modal really exist?

(68) You get a GOOD seat.
      $\neq$ If you get a seat, you'll get a GOOD seat.

cf.

(69) a. You will get a GOOD seat. (no conditional reading)
      b. You would get a GOOD seat. (conditional reading)

The conjunction *but* doesn't have a conditional reading:

(70)   You come on time but you don't get a good seat.
       $\neq$ If you come on time, you won't get a good seat.

An alternative to consider

- Maybe $_{LS}and$ really does exist.
- It encodes a causal/ontic connection, hence no biscuits
- Multi-case reading due to GEN over $_{LS}and$?

Back to IaDs

(71)   Ignore your homework and you will fail this class.

(72)   One more missed homework and you will fail this class.

Non-modal, not even quite propositional first conjunct becomes antecedent of conditional.

Kaufmann's way out?

Kaufmann argues for an almost Keshet-style analysis, except that the modal that takes scope over the conjunction comes from the first conjunct: it's IMP that scopes over the entire conjunction!
But:

- what happens to the performative presuppositions of IMP?
- why doesn't this happen with other strong directives in the first conjunct?

(73)   Take one more step and I'll kill you.

vs.

(74) $\neq$ You should take one more step and I'll kill you.

A point in favor of Portner's analysis

IaDs are just another case of a not-quite-propositional first conjunct of conditional conjunction.

A correlation

Any "imperative" that can be used in n-IaDs can also be used with an acquiescence reading.

In other words: no directive that can occur in the first conjunct of n-IaDs is unambiguously strong.

Recall Hebrew

- Infinitive: command only
- Future: command & acquiescence

FUT in n-laD:

(75) ti-ftax   ?iton   ve-(ata)   ti-mca
      FUT.2-open(sg.M) newspaper   and-you(sg.M) FUT.2-find(sg.M)
          xamesh ta?uy-ot   o yoter
          five   mistake-PL.F or more

   'Open the newspaper and you will find five or more mistakes'

INF not even in e-IaDs:

(76) *la-shevet be-sheket ve-(ata)   te-kabel   pras
      INF-sit   in-quiet and-you(sg.M) FUT.2-receive(sg.M) prize

      Attempted: 'Sit quietly and you will get a prize'

Shape of the survey

+ acquiescence, + IaD (most common)

Hebrew future, Italian/Croatian/Serbian negated infinitive, Albanian subjunctive, and **all** imperatives (except in Turkish, which doesn't have CCs at all)

+ acquiescence, - IaD (rare)

Palestinian Arabic negated present imperfective

+ acquiescence, only e-IaD (rare)

Catalan negated subjunctive, (Greek *na*-clauses?)

- acquiescence, - IaD

Hebrew infinitive, Catalan infinitive, Slovenian subjunctive

- acquiescence, + IaD (**unattested**)

Suspicion:

The source for acquiescence readings and the ability to occur in IaDs is (normally) the same: a minimal, non-modal semantics.

Conclusion, Open Ends, Ideas

Conclusion

Consideration of

- acquiescence & indifference uses
- imperatives in conditional conjunctions

led us to the conclusion that imperatives have a minimal, non-modal semantics.

$\Rightarrow$ We recommend Portner's semantics!

Our to do list

- make a decision on best analysis of conditional conjunction
- understand endorsement markers that disambiguate towards e-IaD readings
- why do IaDs, even n-IaDs, (not) embed as if they are true imperatives?
- what's going on in Turkish?
- how do conditional imperatives work (*if he calls, tell him I'm not here*)?
- if imperatives are semantically weak, why is the strong directive reading the default?
- one last, very puzzling case of conditional conjunction

So …

How do imperatives work?

A trial balloon:

- Portner semantics for imperatives: addressee-restricted properties
- can feed $_{LS}$*and* just like other non-propositional phrases
- for unembedded uses: general purpose PROP operator

    - puts forward the denotation of its prejacent

        - proposition (proposal to add to common ground)
        - question (proposal to add to QUD stack)
        - property (proposal to add to TDL)

    - is essentially a gradable operator

        - has endorsement-strength argument
        - default endorsement-strength: high
        - can be lower if contextually sensible or marked somehow

Low endorsement assertions

All kinds of ways of indicating less than full assertive force:

(77)   He's home?

(78)   He's home, isn't he?

cf. Malamud & Stephenson (2014)

Low endorsement questions

"conjectural questions", such as Romanian *oare* (also Greek *araye*?):

(79)   Oare Petru a   sosit   deja?
       oare   Peter has arrived already

   'Has Peter arrived already?'

"indicates that settling the issue is not necessarily a projected conversational future and therefore that answering the question is optional"

Farkas & Bruce (2010)

Minimal sufficiency conditional conjunction

We've kept the toughest problem for last:

(80)   You only have to look at him and he shies away in fear.

(81)   ≠ If you only have to look at him, he shies away in fear.

(82)   You just look at him and he shies away in fear.

(83)   If you just look at him, he shies away in fear.

<div align="right">von Fintel & Iatridou (2007)</div>

One last summary

Imperatives have a weak semantics.

Imperatives have a gradable pragmatics.