

# (Re)Formalizing the ‘Imperative’ Sentence Type

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## 1 Introduction

-Topic of Inquiry: Imperatives - but construed how?

- Functionally? e.g. command, pointing at the door in anger (Hamblin 1987)
- Form-Function pair? e.g. a linguistic device with a proto-typical force but with interpretive flexibility (Kaufmann 2012)
- Formally? e.g. a specific morphological class

-I focus on the last option, the formal definition.

-Functional and form-function analyses as currently construed fail to explain the interpretation and distribution of morphological imperatives

### 1.1 Imperative as a morphological class

-How do we know a morphologically imperative verb, or **MIV**, when we see it?

-Some languages have overt imperative morphology:

- German *helfen* ‘to help’ → *hilf (du)*, *helft (ihr)*, *helfen Sie*

-Some languages have specific syntax for morphological imperatives:

- Again German *Sie helfen mir jeden tad* ‘You help me every day’ → *Helfen Sie mir jeden tag* ‘Help (you) me every day’

-English MIVs have no special morphology and only (obligatory) special syntax under negation

-But subjects of English MIVs can bind 2<sup>nd</sup> person pronouns (1a-1b) and enforce Condition A (1c)

- (1)
- a. \*Everybody<sub>i</sub> saw yourself<sub>i</sub>/you<sub>i</sub>.
  - b. Everybody<sub>i</sub> look at yourself<sub>i</sub>/\*you<sub>i</sub> in the mirror!
  - c. *pro*<sub>i</sub> Look at yourself<sub>i</sub>/\*you<sub>i</sub> in the mirror!

-The tests in (1) can therefore act as heuristics for MIVs in English

## 1.2 Mainstream views about imperatives

-I argue against the following mainstream claims:

- MIVs are always addressee-oriented (Downing 1969 and others)
- MIVs cannot be embedded (Katz & Postal 1964 and others)
- Imperative is a sentence type (Sadock & Zwicky 1985, Portner 2007, 2012, Kaufmann 2012)

-The final two mainstream claims (no embedding & sentence type) are related

-Properties of main clauses determine the conventional function of a sentence:<sup>1</sup>

- (2)
- a. I know [how John fixed this.] - assertion
  - b. Do you know [that this is broken?] - interrogative
  - c. Everybody understand [that John fixed this.] - ‘directive’ or ‘imperative’
  - d. \*This is the car [(that) fix.]

-The sentence type claim is also motivated by data such as (3)

- (3)
- a. Telefona!  
call.imp.2sg  
Call (her)!
  - b. Telefonatele tutti i giorni!  
call.indic.2pl-her every the days  
Call her every day!
  - c. Lo dica pure!  
it say.subj.3sg indeed  
Go ahead and say it!
  - d. Non telefonarle! / Non le telefonare!  
neg call-inf-her / neg her call-inf  
Don’t call her!

-According to Portner (2004, 2012) all of these Italian verb forms have the same interpretation

-These mainstream claims have, in my view, shaped the empirical domain for the study of imperatives

-In particular, 1<sup>st</sup> and 3<sup>rd</sup> person imperatives are attested and hard to reconcile with the addressee-orientation claim, and are rarely analyzed together with 2<sup>nd</sup> person MIVs

- (4)
- a. aavyeSam jaagrtaat aham  
daybreak watch-imp-1s I  
I will watch until daybreak (Sanskrit, AV 144)

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<sup>1</sup>‘Conventional’ here is a bit of a misnomer, but the idea is that the directive force/function of a syntactic question such as *Could you pass the salt?* is derived from its conventional interrogative force. For example, *You can pass the salt* and *That’s salt* resist the directive interpretation.

- b. tau ... shiStaam  
 the-two ... rule-imp.3d  
 Let the two (of them) rule. (Sanskrit, Maal.5)

-1<sup>st</sup> and 3<sup>rd</sup> person MIVs are often called ‘non-canonical’ (e.g. Kaufmann 2012)

-MIVs can also appear in embedded clauses of interrogatives:

- (5) a. Zakaj te moj nasvet, da bodi pameten, tako jezi?  
 why you my advice that be.imp.2sg sensible so angry  
 Why does my advice that you [must] be sensible make you so angry? (Slovene, Sheppard and Golden, 2002)
- b. Tu David-se milai-hai je ihaan tini baje aaye?  
 you David-the met who here three o'clock come.imp.3rdsg  
 Have you met David who [must] come here at 3 o'clock? (Bhojpuri, author notes)

-And MIVs can appear in embedded clauses of assertions:

- (6) a. Sophocles, Oedipus at Colonus (472-473)  
 krateres eisin, andros eukheiros tekhne, hon krat' erepson kai  
 bowls are men deft skill of-which rim cover-2nd.sing.aorist.imp.active and  
 labas amphistomous.  
 handle double-mouthed  
 There are bowls, the work of skilled men, whose rims and both handles you [must] cover.  
 (Ancient Greek)
- b. To je avto, ki ga prodaj / prodajta / prodajte imprej.  
 this is car which it sell.imp.2nd.sg / 2nd.du / 2nd.pl as-soon-as-you-can  
 This is a car which you [must] sell as soon as you can. (Slovene, Rus, 2005)

-These data are problematic for the mainstream hypotheses.

-MIVs have a wider syntactic distribution (in some languages) than previously thought.

-The sentence-type understanding of imperatives cannot capture the relevant embedded clause data

## 2 What is in an Imperative?

-I propose that an imperative verb encodes weak necessity modality, roughly equivalent to *ought*

-MIVs can (in some languages must) appear in performative contexts

-For English, I adopt aspects of Kaufmann's (2012) modal approach to imperatives

-I differ from Kaufmann in specifying the modal as weak

-I also must show why MIVs must occur in performative contexts in some languages

## 2.1 A paradox for English imperatives

-English imperatives are both as strong (or stronger) and weaker than *must*

-Sentences with imperatives resist certain kinds of follow-ups, just like *must*

- (7) a. # You must go to the store. But I know you won't.  
b. You ought go to the store. But I know you won't.
- (8) ## Go to the store! But I know you won't.

-But sentences with imperatives pattern with *ought* with respect to exclusivity

- (9) Q: How do I get to Harlem?  
a. # You must take the A-train. But there's also a bus.  
b. You ought to take the A-train. But there's also a bus.
- (10) Take the A-train! But you can also take the bus (*e.g. if you're not in a hurry*).

-English imperatives also have all kinds of 'weak' readings:

- (11) a. Take the A-train. (But you can also take the bus...) [*disinterested wish*]  
b. Be asleep. [spoken by an exhausted parent to a suddenly quiet baby monitor] [*absent wish*]  
c. Be a home run! [*absent wish*]  
d. Take two of these and call me in the morning. [*advice*]

-Another crucial interpretation is permission, where MIVs pattern with *ought* not *must*:

- (12) a. Open the window, if you want. [*permission*]  
b. #<sup>as permission</sup> You must open the window.  
c. You ought to open the window.

-According to von Stechow & Iatridou (2012), all major analysis of MIVs are 'strong-to-weak' models

-But none of the 'strong-to-weak' analyses really captures these 'weak' readings

## 2.2 Weak necessity in the context of performativity

-My approach is a 'weak-to-strong' analysis, but within a 'bipartite' model

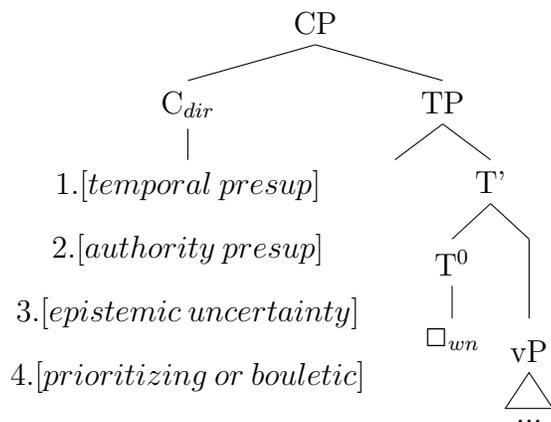
-I argue that the MIV itself encodes weak necessity modality (as defined by Silk 2013)

-But MIVs in English occur in sentences with a left-peripheral operator which encodes performativity

-The left-peripheral operator (which also has syntactic properties) encodes presuppositions

-The presuppositions here are informal versions of those presented in Kaufmann (2012)

(13)



-Equating MIVs with weak necessity modals captures all MIV data that can be paraphrased with *ought*

-Advice, wishes, and especially permissions are no problem

-Strong commands follow from Silk's (2013) definition of weak necessity

-Weak necessity is contingent necessity, and this can approach strong necessity depending on context

-Focusing only on the modal, this analysis has the following properties:

- Says nothing about embed-ability
- Says nothing about addressee-orientation
- Does not restrict subject/verb agreement in any way
- Can handle very 'weak' readings, while able to approach strong necessity

-In sum, limitations in person morphology are pushed into *language-specific* morphological systems

-The fact that e.g. English has only 2<sup>nd</sup> person MIVs is a property English, not imperatives

-Nothing surprising about 1<sup>st</sup> or 3<sup>rd</sup> person imperatives - not 'non-canonical'

-Weak necessity modals are *independently motivated*, not tailor-made for imperatives (cp. Portner 2007)

-Presuppositions (generally speaking) are also independently motivated

### 3 Returning to the Sentence-Type Hypothesis

-Portner (2004), Sadock & Zwicky (1985), and Kaufmann (2012) claim 'imperative' is a sentence type

-The sentence type analysis explains the (purported) interpretive equivalences in (3)

-English has similar data (14); von Stechow & Iatridou (2010) discuss 13 other languages

-These non-MIV 'imperatives' are sometimes called 'suppletive-imperatives'

(14) a. Read this book by Monday!

b. This book is to be read by Monday!

-But, as discussed by von Stechow & Iatridou (2010), only MIVs *always* have a permission interpretation

-See, for example, (15)

- (15) a. Open the window, if you want.  
b. #The window is to be opened, if you want.

-In sum, Portner (2012) is wrong to equate suppletive imperatives with MIVs

-My take on von Stechow & Iatridou (2010) is that *permission* is the distinctive property of MIVs

### 3.1 Rescuing the Sentence Type Hypothesis

-The bipartite semantics developed in section 2.2 can help re-frame the issue

-I assume that Portner (2012) is half correct in equating suppletive imperatives with MIVs

-Specifically, let's assume that MIVs & suppletives have identical *performative* properties

-One difference between an MIV and e.g. (15b) is the ability to have a permission reading

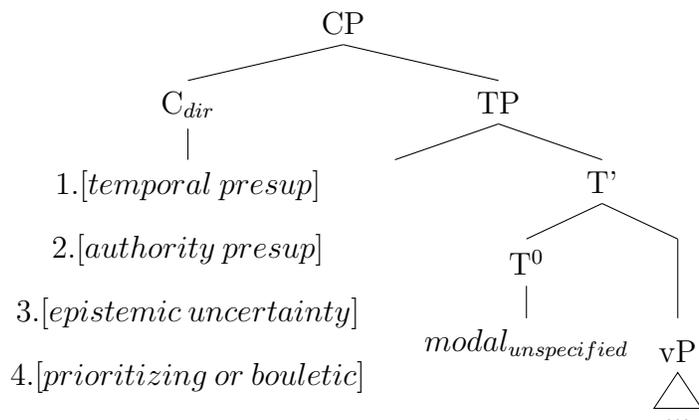
-MIVs and *must* differ along the same lines

-I argue then that the sentence-type formerly known as imperative is defined in terms of the presuppositions outlined above (adopted from Kaufmann (2012))

-All of the relevant forms share the same presuppositional content

-The modal is left unspecified - the sentence-type is, formally, (16)

(16)



## 4 Syntactic Distribution

-In the trees above an element, represented in the syntax,  $C_{dir}$  is associated with presuppositions

- $C_{dir}$  is a sentence-typing element; by definition it is main-clause only (cp. (2))

-Therefore, we don't want this to occur in the embedded clause data (5-6)

-Semantically, these embedded MIVs don't make the sentence 'imperative'

-These considerations raise the following two questions, stated from different perspectives:

- Why are English MIVs main-clause only?
- Why do some languages allow MIVs in main *and* embedded clauses?
- In semantic terms, why are English MIVs always performative...
- but, MIVs in other language are not
- Syntactically, what causes the *obligatory* relationship between  $C_{dir}$  and MIVs in English?

-It would be nice to tie the difference in syntactic distribution to some overt property

-I argue that the presence of rich person morphology is necessary for MIVs to embed in Qs & Ds

-Rich person morphology = person morphology beyond 2<sup>nd</sup> person (for this proposal)

### 4.1 Formalizing the Proposal

-Why should person morphology matter?

-Previous authors (focusing only on main-clause MIVs) have argued for a special licensing mechanism for MIVs, or more specifically their (grammatical) subjects

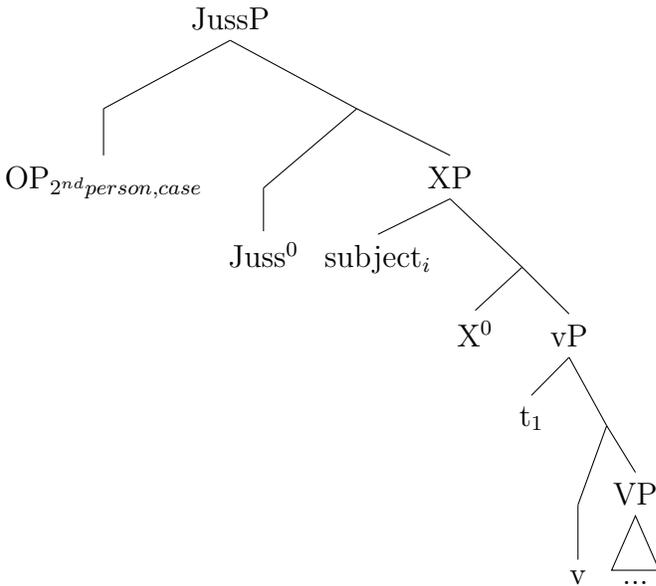
-Bennis (2006), Zanuttini (2008), and Zanuttini et al. (2012) argue that the left-most phrase has 2<sup>nd</sup> person features

-These 2<sup>nd</sup> person features allow English quant. subjects to bear 2<sup>nd</sup> person features (1)

-Zanuttini calls this phrase 'Jussive' -it's operator has 2<sup>nd</sup> person features and agrees with the subject

- $X^0$  in (17) cannot case-value the subject,  $Juss^0$  is itself empty

(17) Zanuttini's (2008) Analysis of English imperatives



-Since i)  $X^0$  can't case-agree, ii) subject needs case, and iii) JussP is main-clause, this rules out embedding

-But, the selectional relationship between  $Juss^0$  and  $X^0$  is not clear in (17), and what about embedding?

-I argue that there are two relevant C-heads:

- (18) a.  $C_{dir}$  = a C head with interpretable 2nd person features and a Directive Force operator  
 b.  $C_{norm}$  = a 'normal' C head

-‘directive force operator’ = presuppositions from sections above

-With brute force, let's say languages such as English and Ancient Greek (AG) differ w.r.t to whether

$C_{norm}$  can select imperative  $T^0$

- (19) a.  $C_{norm}$  cannot select imperative T (English)  
 b.  $C_{norm}$  can select imperative T (AG)

-Imperative  $T^0$  = T-Head with relevant weak necessity modal

-How does a learner come to decide whether they are (w.r.t. (19)) in an ‘a’ type or ‘b’ type language?

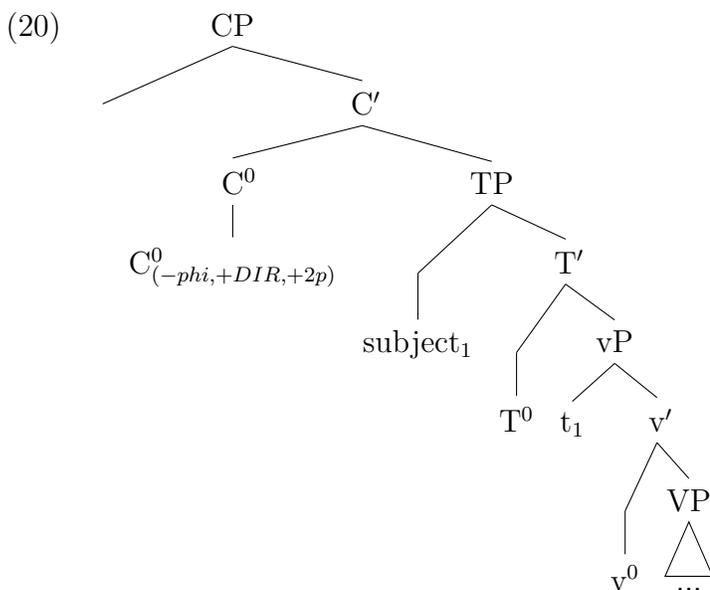
-Enter Feature Transfer (Chomsky 2008):

- Phi- and case-features on the subject-agreeing head ( $T^0$ ) start on C
- $C^0$  properties determine  $T^0$  agreement potential
- What I've called  $C_{norm} = C_{[+phi]}$
- C and T relationships boil down to selection...
- $C_{[+phi]}$  cannot select non-finite T

-Following Bennis (2006) and aspects of Zanuttini (2008), suppose  $C_{dir}$  has  $2^{nd}$  person features

- $C_{dir}$  can always select MIVs;  $C_{dir}$  has  $2^{nd}$  person features

- Therefore, ‘rich’ person for MIVs is 1<sup>st</sup> or 3<sup>rd</sup> person
- From the perspective of Feature Transfer, English-type imperative (paradigms) behave like non-finites, but imperative subjects need case (thus the ‘special’ licensing mechanism)
- A learner starts with (19a) as their grammar, in accordance with the subset principle
- For these learners (e.g. English-type),  $C_{dir}$  is the only mechanism which can license MIVs
- For learners exposed to a rich paradigm, the learner revises to (19b)
- English-type languages therefore require the minimal dominating C-head to be  $C_{dir}$  (a main-clause operator), barring embedding
- The proposed structure for English-type imperatives is (20)



- AG-type languages have no such restriction: embedded imperatives therefore have all of the modal meaning and none of the performative meaning of matrix imperatives
- Because  $C_{+phi}$  can select AG MIVs, they behave syntactically like other finite verbs (Rivero & Terzi 1995)
- Some other interesting predictions arise from the syntactic and semantic proposals developed above
- I’ve said nothing that would bar non-performative MIVs from appearing in main clauses in languages like AG
- And main-clause MIVs in main-clause questions (the so-called ‘hypothetical imperative’) are attested

(21) Plato, Laws (801e)

Oukoun nun, o xene, keistho tauta.  
then now VOC foreigner-voc establish-3rd.sing.pres.imp.mid/pass these-things

Shall these points be established? (Smyth, 1920)

-Another prediction is that embedded clause MIVs should be allowed to have an epistemic interpretation

-A speaker of Slovene confirmed this possibility

(22) Rekel je, da pojej jabolka, ker si tako zdrav.  
said he that eat.imp apples because you-are so healthy

He said that you [must] eat apples because you are so healthy. (author notes)

## 5 Conclusions

-MIVs encode weak necessity modality

-Performativity is separate from imperatives, but a performative syntactic element is obligatorily associated with MIVs in some languages