

A Weak Necessity Semantics for Morphological Imperatives

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1 Introduction

Three conventional and interrelated hypotheses regarding morphological imperatives:

1. imperatives are addressee-oriented (Downing 1969, Potsdam 1998, Zanuttini 2008)
2. imperatives cannot be syntactically embedded (Katz & Postal, Han 2000, Palmer 2001)
3. imperative interpretation is understood in terms of a performative clause (or, sentence) type (Sadock & Zwicky 1985, Portner 2004, to appear, Kaufmann 2012)

Additionally, one canonical/non-canonical distinction:

- Canonical imperatives are 2nd person & addressee-oriented. 1st and 3rd person imperatives are non-canonical (Aikhenvald 2010)

Today, I will argue the following:

1. clauses with verbs that bear imperative morphology do *not* define a (proper) subset of any clause type
2. ‘imperative’ or ‘directive’ force is represented independently of imperative morphology
3. the canonical/non-canonical distinction is reducible to normal cross-linguistic variation in overt morphological classes (e.g. German adjectives are specified for 3 grammatical genders, French 2, and English none)
4. imperative morphology encodes weak necessity modality

Specifically, I will adopt Silk’s (2013) definition of weak necessity, and embed this in a model of imperative pragmatics adapted from Kaufmann (2012).

2 Key Terms and Data

I assume the following definitions and terms:¹

- imperative = a type of verbal morphology, possibly null, or a verb which bears this morphology
- addressee-oriented = subject of verb is coindexed with (a subset of) the ‘real-world’ discourse addressee(s) (Zanuttini 2008)

¹Note that ‘imperative’ has been understood in many ways, by different fields (e.g. philosophy) and subfields of linguistics (see Kaufmann 2012 for review) — this talk focuses on only the morphological definition of imperatives.

- performative clause/sentence, in the context of the literature on imperatives = a clause/sentence which affects the addressee in some non truth-conditional way, e.g. by placing a requirement on the addressee (Portner 2004)
- directive clause = a clause which is performative in the sense outlined above

2.1 The ‘Directive’ Clause Type

Although I argue that morphological imperatives are not a subset of any clause type, I agree with the consensus view (Sadock & Zwicky 1985 and subsequent) that a ‘directive’ (alternatively, ‘imperative’) clause type exists, such that all of the clauses in (1-2) belong to the relevant clause type.

- (1) 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! (Zanuttini 1997, Portner 2011)
- (2) a. Read this book by Monday!
 b. This book is to be read by Monday!

Crucially, not all of the clauses in (1-2) have morphological imperatives. Following convention, I refer to verbs which are not morphological imperatives but which do occur in directive clauses (e.g. indicative (1b), subjunctive (1c), infinitive (1d,2b)) as *suppletive imperatives*.

- suppletive imperative = a verb form that is not imperative, but which occurs in a directive clause

What is the relationship between suppletive imperatives and ‘true’ imperatives? A restrictive hypothesis, advanced by e.g. Portner (2011), is that suppletive imperatives and true imperatives are equivalent. Adopting this hypothesis, Portner (2004, 2007) argues that imperatives have no semantic value apart from their clause-type membership. If this were true, the semantic analysis of imperatives would be largely reducible to pragmatics, and/or a clause-type analysis which could cover both suppletive imperatives and true imperatives alike.

2.2 Refining the Empirical Picture

The following data are problematic for the view that the morphological imperative can be reduced to a clause type. In (3), an imperative occurs in the matrix clause of a question, and in (4) and (5), an imperative occurs in a relative clause of a question.

- (3) Oukoun nun, o xene, **keistho** tauta.
 then now VOC foreigner-voc establish-3rd.sing.imp.mid/pass these-things
 Shall these points be established? (Ancient Greek, Plato, Laws (801e), Smyth, 1920)

- (4) Tu John-se milai-hai je ihaan tini baje **aaye**?
 you John-the met who here three o'clock come.imp.3sg
 Have you met John who [must] come here at 3 o'clock? (Bhojpuri, Medeiros, 2011)
- (5) Zakaj te moj nasvet, da **bodi** pameten, tako jezi?
 why you my advice that be.imp.2sg sensible so angers
 Why does my advice that you [must] be sensible make you so angry? (Slovene, Sheppard and Golden, 2002)

Many languages (including e.g. English) have restrictions on the distribution of morphological imperatives, barring them from the contexts in which they occur in (3-5). In prior research (to appear), I offer a syntactic explanation for the relevant cross-linguistic variation.

Also, 1st and 3rd person morphological imperatives (cross-linguistically rare but well attested) are problematic for any restrictive notion of addressee-orientation.

- (6) a. aavyeSam **jaagrtaat** aham
 daybreak watch-imp-1s I
 I will watch until daybreak (AV 144)
- b. tau ... **shiStaam**
 the-two ... rule-imp.3d
 Let the two (of them) rule. (Maal.5) (Portner, accessed 2013)

Further, as discussed by von Stechow & Iatridou (2010) for a number of different languages, suppletive imperatives and ‘true’ imperatives are not equivalent. Suppletive imperatives sometimes can and sometimes cannot support a permission reading, depending on specific form and specific language; imperatives always can support permission readings in von Stechow & Iatridou’s (2010) set of 13 languages, to which German (Kaufmann 2012) and English can be added.

- (7) a. (✓If you’re cold), open the window.
 b. (#If you’re cold), the window is to be opened.

The data in this section suggest the following:

- the interpretation of morphological imperatives is not reducible to a clause type
- morphological imperatives can occur in embedded contexts, where their ability to affect performativity is limited
- the addressee-orientation property of imperatives is difficult to maintain in the face of 1st and 3rd person imperatives

So what is the semantic value of an imperative? I agree with Han (2000) and Kaufmann (2012) that imperatives such be understood in terms of modals. I depart from both in suggesting that imperatives encode *weak necessity*, similar to *should* or *ought* in their interpretation.

3 Motivating the Weak Necessity Proposal

Here I focus on English examples, illustrating a paradox for imperatives. With respect to interpretative properties, imperatives sometimes pattern with *must* (cp Ninan 2005, Portner 2007), a strong necessity modal. However, imperatives sometimes also pattern with *ought*, a weak necessity modal.

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

- (8) 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.
- (9) ## Go to the store! But I know you won't.

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

- (10) 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.
- (11) 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 (see also Iatridou 2008, Condoravdi & Lauer 2012, Cormany 2013):

- (12) a. Take the A-train. (But you can also take the bus...) [*disinterested wish*]
 b. Be a home run! [spoken by a fan to an in-flight ball] [*absent wish*]
 c. Take two of these and call me in the morning. [*advice*]

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

- (13) a. Open the window, if you're cold. [*permission*]
 b. #^{as permission} You must open the window, if you're cold.
 c. You ought to open the window, if you're cold.

According to von Stechow & Iatridou (2012), many prior analyses of the semantics of morphological imperatives are 'strong-to-weak' models.

But none of the 'strong-to-weak' analyses really capture these 'weak' readings naturally.

3.1 The Weak Necessity Model

I adopt what I take to be the weakest plausible analysis of imperatives = these encode weak necessity modality, and are therefore roughly equivalent to *ought* or *should* in their interpretation.

The specific semantic analysis of imperatives therefore depends completely upon the formal analysis of weak necessity. I adopt the formal treatment of weak necessity presented in Silk (2013).²

Silk's (2013) model of weak necessity depends upon *premise sets* P , which simplify the interaction of modal base and ordering source within Kratzerian modal semantics (Kratzer 1977, 1981, 1991).

Premise sets P describe functions that context supplies for the interpretation of modals; an *unsaturated* premise set P supplies this context. The value of P given a world of evaluation is a *saturated* premise set P_w .³

Within this model, strong necessity is defined as follows:

- (14) 'Must ϕ ' is true at w iff $\cap P_w \subseteq [[\phi]]$ (Silk 2013)

²See also von Stechow & Iatridou (2008) for an alternative view on weak necessity.

³More details about premise sets are given here: "what follows from P_w can be understood as short for talk about what follows from all maximally consistent subsets of $F_w \cup G_w$ that include F_w as a subset, where F_w is a modal base that describes some set of relevant background facts and G_w is an ordering source that represents the content of the relevant ideal evaluation world (Silk 2013, ft. 9)."

Given this definition, “the truth of ‘Must ϕ ’ thus depends on the value of P at the world of evaluation” (Silk 2013). In other words, the truth of a sentence with *must* is checked by comparing whether the conditions in the evaluation world w are such that the P_w verifies the necessity of ϕ .

Silk relates weak necessity to strong necessity in terms of conditional or contingent necessity; weak necessity therefore defines what is necessary if certain conditions hold. Formally, and making use of a selection function s which selects a set of χ -worlds that are closest to w , weak necessity *ought* is defined as (15), such that “‘Ought ϕ ’ makes a claim about the necessity of ϕ at all closest relevant χ -worlds, for some contextually supplied condition χ .”

- (15) ‘Ought ϕ ’ is true at w iff ‘Must ϕ ’ is true at all worlds $w' \in s(w, \chi)$ iff $\forall w' \in s(w, \chi) : \cap P_{w'} \subseteq [[\phi]]$ (Silk 2013)

Under this model, weak necessity is contingent necessity. Therefore, under the right contextual circumstances, imperatives (and therefore weak necessity modals) can very closely approximate a strong necessity modal:

- (16) a. Get the hell out of my office before I shoot you!
 b. You ought to get the hell out of my office before I shoot you!
 c. You must/need to get the hell out of my office before I shoot you!

At the same time, understanding imperatives in terms of contingent necessity easily captures the ‘non-exclusive’ semantics of imperatives.

Under this weak necessity analysis, morphological imperatives in non-directive clauses (3-5) receive an interpretation just like imperatives in directive clauses.

3.2 Weak Necessity in the Context of Performativity

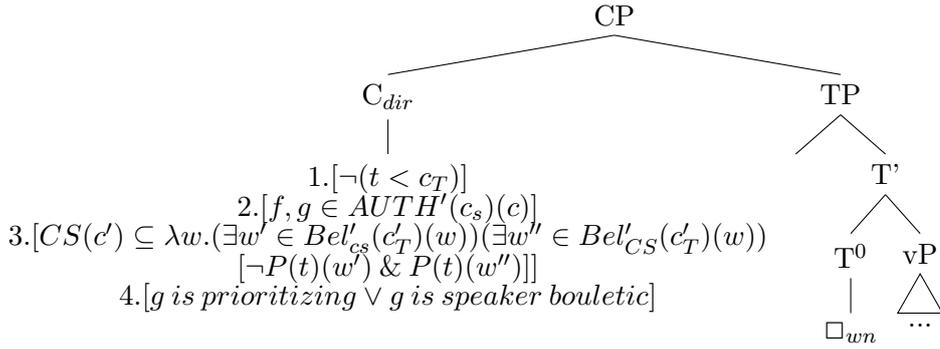
For those imperatives which do occur in directive contexts, I adapt the model of imperative semantics developed in Kaufmann (2012). In particular, I maintain Kaufmann’s model of presuppositions, which are represented in the left-periphery of clauses with imperatives by means of a directive force operator.

The directive force operator enforces the following presuppositions:

1. temporal: imperative is satisfied at or following utterance time
2. authority: speaker is in an ‘epistemically privileged’ position with respect to conversational backgrounds f and g
3. epistemic uncertainty: the speaker believes the fulfillment of the imperative is possible but not a foregone conclusion
4. ordering source: restricts the types of ordering sources available for the interpretation of the imperative (generally, only ‘prioritizing’ ordering sources, in the sense of Portner (2007))

Departing from Kaufmann, I represent the imperative modal clause internally, in T^0 (or a modal P higher than TP):

(17)



Kaufmann (2012) argues that the presuppositional content in (17) derives the performative effect of imperatives.

For a language such as English, in which morphological imperatives are barred from embedded CPs, the directive force operator must select imperative T^0 . Therefore, imperatives in e.g. English are weak necessity modals which necessarily occur in performative contexts.

4 Conclusion: Putting it All Together - Force and Modality

I argued that imperatives cross-linguistically encode weak necessity modality.

In some languages, imperatives must occur in performative contexts. However, the idea that all imperatives are subsumed under one type of performative clause is based upon data from a narrow set of languages.

Suppletive imperatives and true imperatives in directive clauses share the presuppositional content outlined above; i.e. these have identical performative properties. But these forms can differ with respect to modal content, as the availability of permission reading suggests.

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

Under this model, differences with respect to person morphology of imperatives are pushed into *language-specific* morphological systems. The fact that e.g. English has only 2nd person imperatives is a property English, not imperatives. The ‘addressee-orientation’ property of imperatives in e.g. English follows from the fact that English has only 2nd person imperatives. Therefore, there is nothing surprising about 1st or 3rd person imperatives - these are not ‘non-canonical’ from the perspective of imperative semantics, even if typologically rare.

Thank you!

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