Imperatives

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`prefinal version; some glosses and references will be adjusted`

1 Imperatives as linguistic clause types

Most languages distinguish a sentential form type that seems designed for commanding and requesting, and it is standard practice in linguistics to use **imperative** or **imperative clause** to refer to such form types.[1] Mutual translations between imperative clauses of a few different languages are given in (1). They exemplify different strategies of formal marking, namely the use of special syntactic properties in English (absence of a subject in a non-null subject language), verbal morphology in Japanese, sentence final particles in Korean, or a combination of various morphological and syntactic strategies in German.

(1) a. Read this book! English

b. Kono hon-o yom-e!
this book-ACC read-IMP
Japanese

c. I chayk-ul ilk-ela.
this book-ACC read-IMP
Korean

d. Lies dieses Buch!
read.IMP this book
German

Imperative clauses contrast primarily with other syntactic form types that are associated with the discourse functions of asserting (**declaratives**) or questioning (**interrogatives**). Sadock & Zwicky (1985) maintain that clause types are mutually exclusive and jointly exhaustive of a language's sentential form types. The typical paradigm of **major clause types** for English is exemplifed in (2); like many languages, English marks further **minor clause types** like optatives or exclamatives.

(2) a. You are on time. declarative

[1] For instance, Ammann & van der Auwera (2004) define 'imperative' as 'a construction used with the second person, singular and plural, which has as a core meaning the expression of the speaker's wish and an appeal to the targeted person(s) to carry out the wish.' Section 5.2 reflects on the standard classification in light of empirical findings regarding imperative subjects and surrogate imperatives. The English term's origin in Latin imperare 'command' reflects intuitions about their use, similarly for 'the (folk-)linguistic name[s]' of such forms in many other languages(cf. von Fintel & Iatridou 2017).

b. Are you on time? interrogative
c. Be on time. imperative

The categories exemplified in (2) for English are sometimes also called **sentential moods**[2] or **illocutionary moods**.

If membership in a language's imperative clause type is indicated by special verbal morphology, then the respective inflectional forms are referred to as the imperative (form) (or the **imperative verbal mood**) of the inflectional paradigm. In that sense, 'imperative' contrasts with other inflectional categories like **indicative** and **subjunctive**. Imperative verbal mood is often taken to be special in that it unambiguously marks a matrix clause as an imperative clause (in contrast to indicatives and subjunctives, which are usually not tied to particular clause types).[3]

Constructions classified as imperatives are typically associated with second person subjects, and they are special in that these can remain covert in all languages discussed in extensive typological research on imperatives (Aikhenvald 2010:66). However, overt subjects can be inserted for emphasis, and their second person nature can be revealed with subject oriented anaphora:

(3) a. YOU wash this!
b. Wash {yourself, yourselves, *myself, *ourselves, *herself, . . . , *themselves.}

Possible exceptions to the second person nature of canonical imperatives and formally and/or semantically related froms with non-second person marking will be discussed in Section 5.2. Imperative clauses have also been argued to be impoverished in terms of temporal and aspectual opositions, and in some languages, canonical imperative marking is incompatible with negation. These topics are discussed briefly in Section 5.3.

In contrast to this form-based identification common in linguistics, works especially in philosophy and in artificial intelligence sometimes explore semantic meaning and inferential behavior of 'imperatives' under a functional definition (e.g. Ross 1967; Hamblin 1987). With this, these works typically explore the logic of commanding and ordering rather than the semantic meaning of particular linguistic forms, and their scope is thus different from the aims of natural language semantics. Nevertheless, many of the insights obtained in this literature have been extremely influential in figuring out the meaning of natural language imperative clauses.

2 Clause types as objects of semantic analysis

Building on the work of Frege, Tarski, Carnap, and Montague, the success of formal semantics in modelling (or capturing) meaning as underlying cognitive and communicative processes rests largely on the notion of truth-conditions (model-theoretic semantics) or truth as preserved through inferences (proof-theoretic semantics) (see Partee 2011 for a brief his-

[2]If it is assumed that the three sentences in (2) encode different semantic objects, 'sentential mood' is sometimes used for the corresponding semantic objects rather than the sentential form types themselves (see Portner 2018).

[3]The strict connection between imperative verbal mood and imperative clause type is contested for instance by Wilson & Sperber (1988), Kaufmann & Poschmann (2013), Stegovec (2017), and Oikonomou (2016).

tory of the field). But while providing a key to the study of declarative sentences, the notion of truth (and hence, truth-conditions) fails to do so for non-declarative sentences as is evidenced for an imperative in (4). Evaluating infelicities along these lines is sometimes called the *That's (not) true*-test (for discussion, see Section 4.2 below, and Kaufmann 2012).

(4) A: Close the window!
B: #That's (not) true.

Clearly non-declaratives in general and imperatives in particular are well-formed objects and cannot be denied meaning,—it is just not immediately obvious what their meaning should be.[4]

2.1 Sentence radicals with specific forces

In one of the earliest investigations into the meaning of clause types, Stenius (1967) objects to the identification of declarative meanings with truth-conditions. Instead, he builds on Wittgenstein's **picture theory** of meaning, which distinguishes between what is depicted and what a picture is used for. Stenius proposes that the members of a paradigm like (2) all share a comon core (the **sentence radical**), but are distinguished semantically as being associated with specific rules for their use (the so-called **modal element**). Declaratives and imperatives, for instance, are distinguished by modal elements that receive their meaning through his rules (R3) and (R4):

(R3) Produce a sentence in the indicative mood only if its sentence radical is true.

(R4) React to a sentence in the imperative mood by making the sentence-radical true.

On an account like this, the 'meaning' of clause types is so closely related to discourse functions and communicative behavior that it might be considered outside of the realm of semantics. However, Stenius himself emphasizes the conventional nature of the association between clause types and conversational rules by calling his rules semantic.[5]

Gazdar (1981) points out that Stenius's neat picture fails for the variety of interrogative clauses to be found in natural languages. Maintaining a common semantic core between

[4]In *Der Gedanke - Eine logische Untersuchung*, Frege writes: 'Einem Befehlssatze wird man einen Sinn nicht absprechen wollen; aber dieser Sinn ist nicht derart, daß Wahrheit bei ihm in Frage kommen könnte. Darum werde ich den Sinn eines Befehlssatzes nicht Gedanken nennen.' [One does not want to deny sense to an imperative sentence, but this sense is not such that the question of truth could arise for it. Therefore I shall not call the sense of an imperative sentence a thought.] (Frege 1918-19, p. 34[293]) In *Über Sinn und Bedeutung*, he writes 'Der Nebensatz mit "daß" nach "befehlen", "bitten", "verbieten" würde in gerader Rede als Imperativ erscheinen. Ein solcher hat keine Bedeutung, sondern nur einen Sinn. Ein Befehl, eine Bitte, sind zwar nicht Gedanken, aber sie stehen doch mit Gedanken auf derselben Stufe. Daher haben in den von "befehlen", "bitten" [39] usw. abhängigen Nebensätzen die Worte ihre ungerade Bedeutung. Die Bedeutung eines solchen Satzes ist also nicht ein Wahrheitswert, sondern ein Befehl, eine Bitte u. dgl.' [A subordinate clause with "that" after "command," "ask," "forbid," would appear in direct speech as an imperative. Such a clause has no referent but only a sense. A command, a request, are indeed not thoughts, yet they stand on the same level as thoughts. Hence in sub- 39 ordinate clauses depending upon "command," "ask," etc., words have their indirect referents. The referent of such a clause is therefore not a truth value but a command, a request, and so forth.] (Frege 1892, p. 38f. [220])

[5]For explicit arguments in favor of a semantic treatment of clause type differences see also McGinn 1977; Kaufmann 2012.

declaratives and not only polar, but also *wh*-interrogatives suggests that the latter have to be dealt with in terms of existential closure. But this means that all sentences in (5) share the same semantic core, and, given that, intuitively (5b) – (5e) share the same discourse function (information seeking questions), they semantically collapse.

(5) a. Someone read something.
b. Did anyone read anything?
c. Who read something?
d. What did someone read?
e. Who read what?

Considerations along these and similar lines have promoted a treatment of different clause types as genuinely different semantic objects at a level independent of conventional rules for their conversational use.

2.2 Adapting truth-conditions for non-declaratives

The overwhelming success of truth-conditions to elucidate natural language meaning suggests extending them to non-declaratives despite the obvious obstacles. A natural possibility is to relate non-declaratives in general and imperatives in particular to statements about what is true when they are uttered. This strategy is reflected in the **performative hypothesis**. According to this view, clause types are a grammatical strategy to explicitly encode the intended use of a sentence, analogously to what is encoded in the performative prefix of an explicit performative like (6b). The imperative sentence in (6a) is thus interpreted exactly like (6b):

(6) a. Open the door.
b. I order you to open the door.

Katz & Postal (1964) and Ross (1970) develop syntactic versions of this in which the material encoding speaker, hearer, and speech predicate occurs as part of the syntactic structure, rendering (6a) a transformational variant of (6b). They argue that things like logophoric pronouns and speech act-related adverbials constitute evidence for the syntactic presence of the additional material. In contrast, Lewis (1970) assumes that the additional material is not realized syntactically but is brought in by semantic interpretation. Either way, clause types have been reduced to a phenomenon that can be captured in terms of truth-conditions: just like (6b), the imperative sentence (6a) is true if and only if the speaker orders the addressee to open the door. While apparently extending the success of our intuitions about truth-conditions to non-declarative sentences, the results for declarative sentences make it obvious that we have, in fact, shifted our attention from what is encoded by the sentence itself to what is true of what we are doing with the sentence. As observed by Lewis himself (who then suggests a different treatment for declaratives), the truth of (7a) and of (7b) intuitively depends on radically different features of whatever we take to be the basis of evaluating a sentence's truth (reality, for simplicity), and can thus easily be imagined to come apart in truth-value.

(7) a. The earth is flat.
b. I assert that the earth is flat.

Another strategy of adapting the success of truth-conditions to imperatives is to replace the type of value for which conditions are stated. Montague (1974:241) suggests in a footnote that the semantics of imperatives and interrogatives is to be captured in terms of fulfillment conditions and answerhood conditions, respectively. While there is relatively little discussion of this strategy in linguistics, a series of concerns have been raised at various points (cf. Charlow 2014). Firstly, and specifically for imperatives, fullfilment conditions give odd results when combined with a standard Boolean logic for connectives like *and*, *or*, and basically any interpretation of conditional constructions as introduced by markers like *if*. Secondly, assigning different types of conditions makes it hard to make sense of sentences involving coordinations of mixed clause types as in (8), which are naturally used to propose plans for joint action:[6]

(8) Make the tortillas and in the meantime I'll make the chile.

Thirdly, even if imperatives are distinct from other clause types in that they are associated with fulfillment conditions, we would still need a theory of how these relate to the directive discourse function(s) canonically associated with imperatives.[7]

If imperatives stubbornly resist an association with truth-conditions or similar conditions of some other nature, we might of course wonder if according to Frege's **context principle**, their meaning can be abstracted out of larger expressions with tangible truth-conditions (cf. Frege 1884). This strategy has been applied fruitfully to interrogative sentences (see Article 44, Questions and Interrogatives for discussion). However, in most languages of the world, the markers that are characteristic of imperative clauses show at least some resistance against embedding into larger expressions, rendering them a so-called root phenomenon (Hooper & Thompson 1973). Moreover, even when imperatives occur as parts of larger expressions, interpreting these often involves intricacies of its own (see Section 5.1). For these reasons, approaching the meaning of imperatives through Frege's context principle does not seem viable and has, to the best of my knowledge, not been attempted. Still, findings in the recent research on embedded imperatives are sometimes claimed to provide evidence in favor of particular approaches to imperatives (e.g., Kaufmann & Poschmann 2013; Stegovec & Kaufmann 2015; von Fintel & Iatridou 2017; Keshet & Medeiros 2018).

2.3 Imperatives and their inferential behavior

The meaning of linguistic expressions can, of course, also be approached in terms of the inferences they participate in, which underlies in particular the enterprise of a proof-theoretic semantics. The notion of validity of a proof requires the concept of a semantic value that is being preserved throughout the inferential steps,—a role that, for declaratives, is played typically by either truth or acceptance by an information state. For imperatives, however, many different notions seem to be equally good candidates, and inferences will be valid or not depending on whether we are thinking of imperatives as being satisfied or as being in

[6]Example (8) is modified from Starr's (5) *Make the tortilla and I'll make the chile* to avoid a conditional reading as discussed in Section 5.1.4.

[7]For declaratives as associated with truth-conditions, a natural link to their discourse function of asserting is developed by Stalnaker (1978).

force (Ross 1944).[8] Consider (9), an instance of conjunction elimination:

(9) Jump out of the window, and land on the mattress.
Jump out of the window. Fox 2015:(11)

Conjunction elimination appears to be valid if we think of what is being preserved over the inference as whether or not an imperative is **satisfied**. However, intuitions may well change if we think of what is being preserved as whether or not a speaker is willing to issue or endorse a particular command: a speaker willing to issue the conjunction may very well not be willing to issue the first conjunct by itself. To do justice to such findings, Fox (2012) develops a proof-theoretic semantics of imperatives that employs several semantic values (corresponding to a family of **judgments**) rather than a single semantic value.

A particular problem in the semantic theorizing about imperatives is constituted by their interaction with disjunctions: in contrast to declarative sentences, which are generally taken to validate **disjunction introduction** as exemplified in (10), imperatives do not seem to tolerate it, cf. (11) (from Ross 1941).

(10) John slipped the letter into the letter box.
John slipped the letter into the letter box or he burnt it.

(11) Slip the letter into the letter box.
Slip the letter into the letter box or burn it.

The intuitive failure of the inference in (11) is called **Ross's Paradox**. Ross himself operates under a functional concept of imperatives and recognizes equivalent effects for commands or requests carried out with the modal verb *should*, arguing that they always leave the agent a choice between either of the two courses of events named by the disjuncts. Von Wright (1963) recognizes that possibility modals like *may* appear to leave the agent a choice between the two courses of action named in the two disjuncts. He calls that the **Puzzle of free choice permission**. Most recent theories of imperatives acknowledge the similarity between Ross's Paradox and von Wright's Puzzle of free choice permission.[9]

3 Examining the speech act side of imperatives

Attempts to approach the semantic meaning of clause types by establishing conditions about truth or possibly other semantic values simpliciter appear to fail. It might thus seem more productive to link clause type meanings with discourse functions in an even more direct way. However, this faces a challenge inherent already to all the strategies discussed in this section: so far, the core problem for the semantic analysis of clause types was presented as establishing the link between the clause type marking of a sentential linguistic expresssion and the discourse function canonically associated with a given clause type. There is, however, a

[8]The contenders for replacing truth as the value preserved in a valid inference are also the natural ones for replacing it in the conditions that serve as statments of the meanings of declaratives, yielding, for instance, satisfaction conditions (see Section 2.2).

[9]For a variety of different solutions see in particular Portner (2012), Barker (2012), Starr (2011), Aloni & Ciardelli (2013). Kaufmann (2016b) maintains that disjunction introduction is invalid for both imperatives and declaratives, but refutes the idea that imperatives always offer free choice. For a general overview over free choice disjunction, see Article 70.

second problem: despite the fact that we rely on a canonical function to establish clause type paradigms in a given language, most clause types can straightforwardly be employed for a variety of different functions. In the following, I will highlight this fact for imperative clauses.

3.1 Speech act theory and linguistic analysis

With intuitions about semantic values of imperatives failing, and similarly for larger linguistic objects that contain them, a promising starting point for studying the conventional meaning of imperative clauses seems to be the discourse functions they are used to achieve.[10] In linguistics, discourse functions are typically classified according to some version of **classical speech act theory** as developed by J.L.Austin and John Searle (Austin 1962, Searle 1969).[11] While not without problems (for recent discussions, see Harris et al. 2018), these works offer a baseline for the classification of actions that speakers undertake with utterances. In line with this literature, I will conceive of speech acts as events that differ from more mundane ones (like me typing at my keyboard at a particular time and date) in that they are brought about by the use of linguistic material (sentences, for simplicity) relying directly on conventional meaning shared amongst the members of the relevant speech community. Therefore, **speech acts** are particular events of me promising the editors to submit this paper, my son requesting from me that I buy him ice cream, and so on. I will use **speech act types** for what is shared by all speech acts of someone requesting something from someone, someone promising something to someone, etc., respectively (these being requests, promises, etc.).[12]

Linguistic analyses, in particular, often rely on a scoreboard understanding of speech acts (inspired by Lewis 1979b), which classifies them in terms of contextual commitments (about what is known and desired) that speakers undertake themselves, presuppose about themselves and/or their hearers, and suggest for their hearers to undertake. As pointed out by Harris et al. (2018), such a view abstracts away from fundamental questions about the deeper nature of speech acts. The current literature on clause types shows that this choice may still be helpful to gain insight into crucial aspects of their semantics. However, it is good to keep in mind that such theories rest on assumptions that may have to be revisited at a later point.

Given what was said initially about their canonical function, it seems natural to relate imperatives to what Searle labels **directive speech acts**: speech acts by which the speaker intends that the addressee act in a particular way. At this point, the single core problem for a semantic analysis of imperatives appears to be the task of encoding a conventional link between a particular natural language form and the discourse function of directing. However, the literature is rich with examples of imperatives used in ways that do not constitute directive speech acts (cf. Section 3.2), and if we want to avoid an unheard of proliferation

[10]This intuition seems to be shared regarding the semantics of imperatives by authors that then arrive at rather different proposals (e.g., Portner 2005; Kaufmann 2012; Condoravdi & Lauer 2012; von Fintel & Iatridou 2017). In contrast, Charlow (2018) explicitly objects to priviledging an expression's discourse function over its cognitive significance.

[11]See Levinson 1983 for an introduction; Searle & Vanderveken 1985 for an attempt of an axiomatization.

[12]Instead of speech act types, Searle 1969 (also Gazdar 1981) uses **illocutionary force** for this level of categorization. I am avoiding this term because it is often used for speech act types as encoded syntactically by particular sentential form types.

of homophony that repeats itself in language after language, these cases cannot be ignored when developing a theory of the conventional meaning of imperative clauses.

3.2 Imperatives and the speech acts they are used for

It is often observed that, despite a perceived canonical link with orders and requests, imperatives can be used naturally for a much wider range of speech acts (Schmerling 1982; Davies 1986; Wilson & Sperber 1988; Han 1999,...), a phenomenon Schwager (2006b) dubs the problem of **functional inhomogeneity**, and Condoravdi & Lauer (2012) call **functional diversity**.

Examples that straightforwardly fit the notion of directive speech acts include the ones in (12).

(12) a. Close the door. (This is an order.) Order
b. Please help me with this. Request
c. Don't go near that package! (It looks dangerous.) Warning

For these, the question is mostly to what extent distinctions that can easily be drawn at the level of speech act theory are reflected in linguistic marking. For instance, while the effect of adding *please* to soften an order to a request seems straightforward, Lee (2018) observes a (different) softening effect for emphatic *do*:[13]

(13) DO close the door. Emphatic suggestion, *Order

The directive nature is less clear for imperatives that are used to give advice. Building on their intuitions about the use of the corresponding English speech act verbs, Searle & Vanderveken (1985) point out that *advice* can describe speech acts in which the speaker actually intends to get the hearer to act in a certain way, but also non-directive (in fact, assertive) speech acts, in which the speaker merely provides information about how to best achieve a given goal but does not intend to influence the hearer's actions. For the presumed link between imperatives and directive speech acts, only the second type of advice constitutes a problem. Still, the literature agrees that there is ample evidence of such uses, for which Condoravdi & Lauer (2012) coin the term of **speaker disinterested advice**.

(14) A: How do I get to Harlem?
B: Take the A-train. (That's the quickest way to get there.) Advice

Another type of imperative speech acts that do not naturally fall into Searle's class of directive speech acts are those that expand the range of permissible options for the addressee instead of constraining it. Imperatives can also be used in this way, with the resulting speech acts called 'permissions' (Oikonomou 2016) or 'permission-like' (Portner 2007; Kaufmann 2012).[14] However, these do not constitute a homogeneous class, as indicated by the more fine-grained labels in (15) to (17).

[13] Use as an order remains possible if the stress indicates contrast with a previous instance of *Don't close the door*.

[14] Searle himself considers permission a directive speech act, but it is not entirely clear in what sense the speaker aims to influence the addressee to act in a certain way.

(15) Have a seat! Invitation

(16) A: Can I open the window?
B: Sure, go ahead. Open it. Acquiescence[15]

(17) (*exasperated parent*) Well, then go to that damn party. Concession

Potentially linguistically relevant differences between these cases concern the extent to which it is known to the participants that the addressee desires to realize the prejacent, and whether the speaker is reluctant to allow for its realization. An overall difference from canonical permissions emerges in sequences involving conflicting prejacents. While slightly stilted, (18a) is fully felicitious; (18b), in contrast, is infelicitous independently of the particular contextual settings.

(18) a. Hereby, I allow you to leave through the backdoor, and, hereby, I allow you to leave through the frontdoor.
b. #(Ok,) leave through the backdoor, (and, ok,) leave through the frontdoor.

With permission-like imperatives, it seems to be taken for granted that the addressee will draw on the (new) possibility (unless declining explicitly). It appears that the family of permission-like imperative utterances (including also invitations and concessions) require that the speaker assumes that the addressee is interested not only in the prejacent becoming permissible, but has already formed a preference for carrying it out if it does.

Finally, the most obviously non-directive uses of imperatives involve wishes. This holds in particular for those that target states that are (taken to be) already objectively settled as exemplified in (19) (cf. Kaufmann 2012).

(19) Wishes:
a. Get well soon!
b. (*speaking in your mind, while rushing to your friend's house*) Please be there!
c. Please don't have broken another vase!

Another type of imperative utterance that has received relatively little attention in the literature so far is exemplified in (20); Murray (2016) calls this an **advertisement imperative**:[16]

(20) Win a drum!

The speech act executed is probably best classified as an invitation to participate in the game and thereby (possibly) win a drum; such examples differ from other imperative invitations in that the property that is linguistically expressed is not under the control of the addressee.

By and large, the speech act types we have been discussing so far seem to be available for imperative clauses universally.[17] But interaction with other grammatical categories or the insertion of discourse particles can render available discourse functions that seem to be

[15]Example and term from von Fintel & Iatridou (2017).

[16]The example is taken from Murray (2016), who discusses its Cheyenne counterpart in connection with pragmatic effects of a grammatical distinction between imperatives for immediate and for delayed execution (see Section 5.3).

[17]Exceptions to this pattern are potentially revealing for how the semantic analysis of imperatives should be packaged; note, for instance, that in Greek, imperative clauses are not used to express wishes and subjunctives are used instead, Oikonomou (2016). See Section 5.2 for discussion of subjunctives as imperative surrogates.

idiosyncratic to individual languages. For instance, the imperative forms of Japanese can combine with prejacents describing counterfactual courses of events (either in the past or the future) to reprimand the addressee's choice of action in the actual world (Saito 2016).

(21) Kinoo gakkoo-ni {ko-i, ki-te kudasai} yo!
yesterday school-DAT {come-IMP.PLAIN, come-IMP.FORMAL SFP
'You should have come to school yesterday!' Saito 2016:(2b,3a)

The same possibility is available in Catalan Sign Language (Quer 2018). Yet other languages can realize this type of speech act with what looks like the regular imperative clause type with past marking (e.g. Spanish: Bosque 1980; Vicente 2013; Dutch: Mastop 2005:71-80 and references there).

Other non-standard imperative speech acts can be brought out by discourse or quantificational particles. In German, a quantificational particle *mal* (meaning roughly 'once', 'for one time') together with contrastive focus on the subject can give rise to a particular type of metalinguistic dare (cf. (22)).[18] This use also renders otherwise highly marginal passive imperatives fully acceptable as in (22b). In the absense of *mal* (and preferably also the overt subject pronoun *du* 'you'), (22b) can only constitute a curse.

(22) a. Fass DU mal auf eine heisse Herdplatte!
touch.IMP you MAL at a hot stove.top
'YOU try touching a hot stove (and then we can talk)!'
b. Werd DU mal von einem Haifisch gebissen!
become.IMP you MAL by a shark bitten
'YOU have the experience of getting bitten by a shark (and then we can talk)!'

The insertion of the German discourse particle *ruhig* (homophonous with the adjective/adverb for 'quiet(ly)') facilitates use for invitations or to express acquiescence, but it cannot occur in imperatives expressing concessions (Schwager 2010), see (23a). However, it also marks invitations to an experience the addressee seems averse to (Grosz 2009), see (23b), which differ from regular permission-like cases.

(23) a. Setz dich ruhig.
sit.down.IMP yourself RUHIG
roughly: 'Sit down if you like.' (conveys: 'there's no obstacle')
b. Fass den Frosch ruhig an.
touch.IMP the frog RUHIG VPART
'Go ahead, (you can really) touch the frog (it won't hurt you).'

Usages along these lines appear to rely on additional material like discourse particles, contrastive focus, (reduced) adverbial clauses (*if you like*), etc., which differ considerably even across closely related languages like English and German.

[18] *mal* occurs in many other uses of German imperatives as well, for instance, in casual suggestions. Anita Mittwoch (p.c.) observes that it seems to be obligatory with quantificational subjects; see Section 5.2.1.

3.3 Imperative speech acts and indirectness

A natural reaction to the data discussed in Section 3.2 may be to relegate them to an appropriate account of indirect speech acts. Austin (1962) observes mismatches between linguistic form and function along the following lines.

(24) Can you pass me the salt?

The frequent use of an interrogative like (24) for a request to pass the speaker the salt is not standardly taken to indicate that the meaning of interrogatives should be underspecified so as to allow for a use as requests.

On at least one view, (24) still serves to ask a question and the requesting speech act is brought about at the same time or through that questioning speech act. Arguments for this view come from the possibility to react to both types of speech acts (Clark 1979), see (25a), as well as speech reports that can serve to make the dual nature explicit (Heim 1977), see (25b):

(25) a. Yes, here you are.
b. I requested the salt by asking my interlocutor if they could pass it.

Kaufmann (2016a) argues that speech reports along these lines are infelicitious with many non-canonical (and specifically non-directive) uses of imperatives; in contrast, imperatives used for genuinely indirect speech acts as exemplified in (28) pattern with the classical example in (24) (cf. (25b)):

(26) a. (To go to Harlem) Take the A-train.
b. *as a report of (26a):* #She advised him to take the A-train by ordering him to do so.

(27) a. Please be in that room!
b. *as a report of (27a):* #She expressed a wish for him to be in that room by commanding/ordering him (in absentia) to be there.

(28) a. SON: Can I have chocolate?
ME: Finish your pasta.
b. I denied my son's request for chocolate by ordering him to finish his pasta.

Condoravdi & Lauer (2012) argue that indirectness is gradual and argue for a radical underspecification regarding what speech acts imperatives are conventionally associated with. A uniform derivation of conversational function is attractive if it can be made to account for the contrasts involving speech reports. Charlow (2011) defends an analysis of non-directive imperatives as indirect speech acts. He assumes that indirectness consists in the blocking of particular components of a clause-type's meaning in case of conflicting information in the context. Remnants of the imperative meaning are assumed to transpire. While the arguments presented in this section against an indirectness approach to non-directive imperatives are largely orthogonal to his take on indirect speech acts, his analysis falls short of explaining what actual speech act is carried out by an imperative utterance with a partly blocked conventional meaning.

The data discussed in this section suggest that an analysis of imperatives used for non-directive speech acts cannot be obtained straightforwardly from a strictly directive conven-

tional meaning together with general assumptions about indirect speech acts.

4 Imperatives in current semantic theorizing

Current semantic theories of imperatives are developed against the foil of at least three major innovations in our understanding of semantics and the semantics-pragmatics interface. Firstly, from the early 1970s on, contextual representations got enriched to model various aspects of ongoing conversations, for instance, what information has been shared so far and what options are granted as permissible. Specifically, Stalnaker (1978) develops an account of assertions that in a way, turns the tables on how truth-conditions and speech acts are related in the explicit performative hypothesis. Where the latter builds information about the speech act into the truth-conditions (leading to well-known problems for assertions specifically), he assumes that the key effect of an assertion consists in adding propositions (modeled as sets of possible worlds, and hence equivalent to functions from possible worlds to truth-values) to what counts as mutually shared belief for the purposes of a given conversation (the **common ground**). By this, truth-conditions in a possible worlds framework (i.e., functions from possible worlds to truth-values) are related to a discourse effect that can serve as the model of assertions. Lewis (1979b; 1979a) adds representations for non-epistemic information (**commitment slates**, **permissibility sphere**) to model speech acts like commands or permissions. Provided with suitable denotata and discourse effects, imperatives could thus receive an analysis along the lines of Stalnaker's theory of declaratives as used in assertions. More recent theories of conversational moves emphasize the proposal character of many speech acts by adding parameters for issues under consideration like a **question under discussion** (Roberts 1996) or a **table** (Farkas & Bruce 2010), and they often separate out the public commitments of individual participants (Gunlogson 2003).

Secondly, in the late 1970s and early 1980s, investigations of in particular indefinites, pronouns, modality, and presupposition projection challenged the primacy of truth-conditions (Heim 1982; Kamp & Reyle 1993, ARTICLE 28[Presuppositional Binding]'). Assuming suitably enriched models of utterance contexts, dynamic semantic theories identify semantic meanings directly with **context change potentials**, i.e. functions from a given input context to the context that results from integrating the utterance.

Thirdly, from the beginning of the 21st century on, we see a new awareness of different layers of conventional meaning, including not only a split into 'asserted' (proffered) vs. presupposed content, but also conventional implicatures, and various types of expressive meaning, with each having potentially different compositional and discourse functional behavior (Karttunen & Peters 1979; Potts 2005; Tonhauser et al. 2013; Gutzmann 2015; Koev 2018, ARTICLE 87 [Dimensions of Meaning]). Another way of using a single layer of conventional meaning itself to represent the opening of issues can be seen in pragmatically oriented uses of alternative semantics (Hamblin 1973) and especially Inquisitive Semantics (Ciardelli et al. 2013).

Against this background, formal semantic theories of imperatives seek to find semantic denotata that, together with suitable assumptions about their use in discourse, elucidate the problems that were highlighted in Sections 3.2 and 3.3 above. The two core problems of any such investigation can be summarized as follows:

(29) a. Conventional meaning to encode canonical imperative force: What relates

imperative form types to their canonical directive force (as commands or requests)?

b. Speech act types for actual imperative utterances: How can we model the interaction of an imperative's conventional meaning with the context in which it is uttered to explain the speech act that results?

The resulting theories differ in what particular objects imperatives denote, what additional components of the utterance context need to be represented, and what principles have to be assumed about their mutual interactions. In the following, I will begin by investigating strategies that aim to build some notion of force into the conventional meaning of the imperative, and I will contrast them with approaches that operate with functionally neutral denotata that are complemented by various types of not-at issue meaning (like use conditions or presuppositions).

4.1 Forces as denotata

Clause types as introduced in Section 1 are primarily investigated as types of main clauses (root phenomena). Nevertheless, for interrogatives and declaratives, the distinction seems to carry over to embedded clauses. For instance, the depedent clauses that combine with predicates that name speech acts of asserting or asking tend to display (parts of the) marking of matrix declaratives and interrogatives, that is, the clause types associated with the corresponding speech acts, respectively. Things are different for imperatives, which have long been said to not embed at all, which should mean, for instance, that whatever markers are crucial for marking matrix clauses as belonging to the imperative clause type cannot appear in embedded sentences (Sadock & Zwicky 1985; Han 2000).

While the more recent literature recognizes that this claim cannot be upheld in its strong form (cf. Section 5.1), embedded imperatives are clearly constrained in interesting ways. Part of the literature sees this in connection with the broader assumption that clause types, in fact, encode illocutionary force directly.[19] At the syntax-semantics interface, this can be achieved either by relying on a particular force operator, or by composing a series of different meaning elements. Both strategies have been related to particular syntactic properties of the **left periphery** of the sentence. While force operators have initially been seen as a convenient way to explain the ban on embedding, more recent semantic theories follow insights advocated prominently in Kamp (1973; 1978) that aspects of pragmatic meaning (like speech act related meanings) can sometimes serve as the input to recursive compositional interpretation. They thus individuate a particular class of meanings and use the resulting distinctions to suitably constrain embedding; as a case in point, Krifka 2001 introduces a semantic type *a* for speech act denoting linguistic expressions; see also Krifka 2014.

If clause types specify a particular illocutionary force (speech act type), we obtain what Gazdar (1981) ascribes to Searle (1975) as the **literal meaning hypothesis**. Gazdar points out that, amongst other things, this runs into problems with functional diversity as discussed for imperatives in Section 3.2 above. More recent theories thus often employ functionally

[19] If differences in clause type indicate differences in the illocutionary force encoded and if objects encoding illocutionary force resist embedding, then the distinction between embedded declaratives and embedded interrogatives cannot be a distinction in (full-fledged) clause type;–or else, just like embedded imperatives, such objects would be predicted to not exist.

underspecified operators that encode aspects shared by larger classes of speech acts–ideally those that can be carried out by the respective clause type. ASSERT operators as found in much of the recent literature are often to be understood in this way (e.g., Pearson 2013). More flexible compositional encoding can aim to assign specific interpretations to specific elements of marking across different clause types, for instance, the position of the finite verb (see Truckenbrodt 2006 and, for critical discussion, responses in the same issue).

While not postulating a categorical split into force and content, dynamic theories can oftentimes be construed in a similar way: imperatives, for instance, encode a propositional prejacent, and at the same time, denote an update that enriches a contextually given **preference structure** on what is compatible with the common ground by introducing a preference for the imperative over (in the simplest case), its negation (Starr 2011; Murray 2014). The resulting context change potential of an imperative $p!$ is then a map from a context neutral with respect to p to one that reflects a preference of p over $\neg p$. Davis (2009; 2011) proposes to add a discourse component that reflects the intentions a participant is publicly committed to, and lets imperatives update the **public intentions** of the speaker or another agent. For such theories, we can think of p as the semantic core and the particular update effect of inducing a preference as the force related meaning element.

Thinking back to earlier semantic theories, the use of a specific force operator to represent the link to a particular illocutionary force appears reminiscent of Stenius's 1967 split into a force-representing 'modal element' and the 'sentence radical'. However, at least the following two differences are noteworthy. Firstly, for Stenius, the semantic meaning encoded by the modal element is a semantic rule of use, and seems of a different nature from what is assigned by the function of (compositional) semantic interpretation to other linguistic expressions. Secondly, most modern theories with force operators are not committed to the idea that there has to be a common semantic core across clause types. Differences in semantic core can then even be used to constrain what force operators can appear in a given clause type: if, for instance, imperatives denote properties, compatible with COMMAND or PERMIT operators, whereas an ASSERT operator requires a propositional complement, we obtain an explanation for why they can be used for commands and permissions, but not assertions (see Krifka 2004 for a suggestion along these lines).

4.2 Imperatives as inherently force-free semantic objects

In contrast to the view that imperatives encode (aspects of) force directly, other authors maintain that they encode more traditional semantic denotata after all.

Building on native speakers' intuitions (for instance, the *That's (not) true*-test in Section 2) as well as the observations about non-Boolean inference patterns (see Section 2.3), many authors argue that imperative clauses cannot refer to truth-values and cannot denote propositions.[20] At the same time, many authors agree that imperatives display a certain affinity with prioritizing[21] modal verbs; compare (30a) with (30b). Like imperatives, modal verbs can be used **performatively** in commands, permissions, and the like, and can then

[20] Han (2011:1792) writes 'Imperatives cannot be said to be true or false. They do not assert anything about the current world and so it does not make sense to assign a truth value to imperatives.'

[21] Portner (2007) introduces 'prioritizing' to cover modality concerned with what is possible or necessary according to rules, goals, or desires (i.e., deontic, teleological, and bouletic modal flavors, respectively).

make true subsequent **descriptive uses** of modals in assertions as in (30c).[22]

(30) a. Close that door now!
b. You have to close that door now!
c. (It is true that) you have to close that door.

Authors differ, however, in how much of this affinity with modal verbs they take to be reflected in the denotation of the imperative. Von Fintel and Iatridou 2017 distinguish between **strong theories** that build modal meaning into the semantics of the imperative, and **minimal theories** that assign them non-modal denotata.[23] While other combinations are perfectly conceivable, the force-free accounts that are currently receiving most attention are all either minimal and non-propositional, or strong and propositional.[24] The discussion in the following is structured by the semantic types of the denotata assigned to imperatives.

4.2.1 Non-propositional force-free accounts

The best developed theory relying on a traditional but non-propositional semantic denotatum for imperatives is Portner 2005; 2007; 2012 (see also Pak et al. 2008; Zanuttini et al. 2012). Portner develops his theory of imperatives against the backdrop of clause types in general, asking why a split into three major clause types is so prevalent in the languages of the world. He argues that three different semantic types regulate three basic discourse processes of updating (i) information about the world (reflected in the Common Ground), (ii) what to do (reflected in separate To-Do Lists for each of the participants), and (iii) what issues to resolve (reflected in the Question Stack). These three processes rely on propositions, properties, and sets of propositions respectively, corresponding to Common Ground, To-Do List, and Question Stack being made up from sets of the respective objects. Declaratives, imperatives, and interrogatives have different semantic types each and are thus earmarked for exactly one of these update processes, a link that is encoded by separate use conditions. Imperatives, in particular, denote properties.

However not all linguistic expressions that denote properties can be used like imperative clauses. In response to this concern, Portner 2007 constrains the respective use conditions for properties to apply just to 'matrix sentences'; according to Portner 2016, they affect specifically imperative clauses.[25] The latter version brings the theory closer to a dynamic semantic theory with specific encoding of illocutionary force. However, while the To-Do List-oriented use condition is tied specifically to the imperative clause type, it is not part of its semantic meaning (it is thus **post-compositional**), which makes a crucial difference when it comes to embedded occurrences (see Section 5.1).

[22] The distinction betwen descriptive and performative uses of modals builds on Kamp (1973; 1978).

[23] Note that force-based theories as discussed in Section 4.1 typically also belong to the class of strong theories. Asher & Lascarides 2003 could be considered an exception in that imperatives are assumed to pointwise change the worlds in an information state to ones that verify the imperative prejacent, making their account both force based and minimal.

[24] Han 1999 analyzes imperative clauses as denoting sets of propositions that are entailed by the deontically optimal worlds in conjunction with the prejacent. This account is thus force-free, but modal (i.e., strong) and non-propositional.

[25] Hausser (1980) also interprets imperatives as properties but does not develop a full-fledged theory of how they achieve their canonical or utterance-specific function.

An alternative strain of theories that rely on force-free, non-propositional denotata employs **action terms** (e.g. Segerberg 1989; Mastop 2005; Barker 2012). These theories emphasize in particular the special inference behavior of imperatives (and certain irregularities with negation), while tending to focus less on the interface between linguistic object uttered and speech act performed.

4.2.2 Propositional force-free accounts

Kaufmann (2012) (building on Schwager 2006b) and Condoravdi & Lauer (2012) assume that imperatives denote propositions after all, and that the discourse dynamics of proposition-denoting linguistic expressions is put in motion by a uniform principle. Following Stalnaker 1978's account for assertions, uttering an unembedded linguistic expression that expresses a proposition (with falling intonation) amounts to proposing it for addition to the common ground. In a slightly more elaborate model with separate public beliefs of speaker and addressee (Gunlogson 2003), propositions (uttered with falling intonation) are added automatically to the public beliefs of the speaker. Kaufmann (2016a) emphasizes that an analysis of imperatives that relies on such discourse principles does not amount to an assertoric account of imperatives (unlike for instance, Bach & Harnish 1979's treatment of explicit performatives; see also Portner 2016 for discussion): while the effect of updating the common ground (or the speaker's public beliefs) is a core ingredient of the speech act of asserting, it is not by itself definitional of assertions (as emphasized already in Stalnaker 1978). In this, Kaufmann distinguishes a technical representation of context change (adding a proposition to the common ground/the stock of public speaker beliefs) from speech acts like asserting, commanding, requesting, permitting and the like. While at odds with the intuition that imperatives cannot be used for assertions, and do not have a truth-value, Kaufmann argues that the account captures straightforwardly that, like declarative sentences, imperatives provide (semantic) answers to questions.

Kaufmann's 2012 and Condoravdi & Lauer's 2012 accounts differ in how they aim to block a descriptive or assertoric use for the imperative. Kaufmann (2012) (building on Schwager 2006b) argues that imperatives contain a covert modal operator that encodes a flavor of prioritizing necessity (e.g. the speaker's wishes, or the addressee's goals, etc. in interaction with the relevant circumstances), and in that are similar to overt modals like *should* or *have to* on their standard analysis (Kratzer 1986).[26] At the same time, the operator presupposes that the modal flavor with respect to which it is evaluated enjoys a particular status in the ongoing conversation: imperatives are used in practical contexts to select among possible actions the addressee might take (i.e., they resolve a **decision problem**) or in expressive contexts where they express the speaker's desires about settled states of affairs. The modal flavor has to be considered **decisive** (basically, all participants are willing to rely on what it dictates when choosing between the available courses of events; see Kaufmann & Kaufmann 2012 for details), and the speaker has to count as having perfect knowledge

[26] Kaufmann (2012) assumes that, absent explicit modification, the modal force of the imperative operator is universal. She argues, however, that this is derived compositionally and an underlying possibility reading can be brought out by anti-exhaustifiers like *for example*. Oikonomou (2016) provides arguments that even unmodified imperatives are underlyingly existential in force and that exhaustification is derived with respect to contextually given alternatives. Medeiros (2013) argues that imperatives are weak necessity modals like *should*, while Grosz (2009) takes them to be variable in quantificational force.

about what follows from this modality (**epistemic authority**). In contexts that meet these requirements, Kaufmann argues, imperatives will invariably have a non-descriptive effect; in all other contexts, presupposition failure results in infelicity.

Condoravdi & Lauer (2012) assume that each participant is associated with various preference structures (partially ordered sets of propositions), where one of them, the agent's **effective preference structure**, represents the agent's resolution of any potential conflicts between their desires in light of what they know about the situation. An **effective preference** is a maximal element in such a structure. Imperative clauses denote the proposition that the speaker is publicly committed to having an effective preference for the underlying proposition (for instance, *Read the book!* encodes that the speaker is publicly committed to having an effective preference for the addressee to read the book). By general assumptions about utterances of propositional objects and public commitments, uttering an imperative is self-verificational: the speaker incurs a public commitment to an effective preference for the prejacent.

Both propositional accounts aim to capture that the imperative speaker is somehow committed to the choice expressed by the imperative. This aspect of imperatives is witnessed by the following contrast with **distancing** by the speaker:[27]

(31) a. #Read that book, but on no account would I want you to do this.
b. According to the guidelines you should read that book, but on no account would I want you to do this.

Both Kaufmann's requirements for the imperative modality to be decisive and Condoravdi & Lauer's choice of the speaker's effective preferences aim to derive this contrast. However, effective preferences require extra assumptions in order to capture speaker disinterested advice as exemplified in (14), repeated from above (for discussion, see Kaufmann 2016a).

(14) A: How do I get to Harlem?
B: Take the A-train. (That's the quickest way to get there.) Advice

In sum, while some authors take speaker intuitions as reflected in the *That's (not) true*-test (see (4) above) to be proof that imperatives cannot denote propositions, other authors draw a different conclusion. Kaufmann (2012) argues explicitly that the *That's not true*-diagnostic actually tests for assertive speech acts, rather than semantic value, and proposes for imperatives propositional denotata that are shielded from assertive use by the additional not-at issue meaning component. Charlow (2014) criticizes this strategy, arguing that imperatives are not only non-assertive, but rather truly non-propositional in their cognitive value: roughly, it is not just that we cannot use them like other propositions (which is what Kaufmann and Condoravdi and Lauer appear to predict), but we cannot even think of them the way we generally think of propositions. His view, however, rests on the assumption that (i) the cognitive value is primary and (ii) is constituted predominantly by the at-issue layer of meaning. Both points, however, would have to be argued for on independent grounds.

[27]Native speaker intuitions about *but I don't want you to*, as used in most of the literature (e.g. Schwager 2006b; Kaufmann 2012; Condoravdi & Lauer 2012; Stegovec & Kaufmann 2015), vary depending on whether *want* is construed as expressing something similar to Condoravdi & Lauer 2012's effective preferences (on which it feels infelicitous) or a mere desire reading (on which the follow-up can feel felicitous). The stronger follow-up chosen here is meant to exclude the mere desire interpretation of *want*.

4.2.3 Force-free accounts and dynamic forces

Semantic analyses of imperative clauses that do not treat (aspects of) force as encoded conventionally typically rely on default principles that regulate how given ('forceless') semantic objects, like propositions or properties, are supposed to interact with the representations of utterance contexts. For instance, speakers uttering propositions (with falling intonation) automatically incur a public commitment to their content. The difference between such a split into a pragmatic condition of use and an operator that encodes a map between input and output discourse context (or contexts, as in Davis's 2011 relational view) is relatively small, but can have a bearing when it comes to embedded occurrences (Kamp 1973, 1978).[28]

5 Specific topics in the recent literature on imperatives

5.1 Embedded imperatives

Regarding the status of imperatives in embedded positions, the linguistic literature has undergone something close to a paradigm change: until the late 1990s, it was basically taken for granted that imperatives cannot occur in embedded positions. While this 'ban on embedded imperatives' is usually not made precise, it appears to have a syntactic and a semantic side to it: syntactically, clauses containing the markers characteristic of imperatives cannot appear in the c-command domain of other linguistic expressions, and semantically, imperative clauses or the markers characteristic of them cannot be interpreted in the scope of other operators. As pointed out by Schwager (2006b), the semantic part of this claim is particularly hard to capture: absent a fixed interpretation, scopal order can be re-arranged by assigning suitable meanings. The semantic claim hence relies on an intuitive understanding of what is the contribution of the imperative (marker), and what is the contribution of a potentially outscoping operator. Given this assumption, unembeddability was bascially taken as a defining characteristic of imperative clauses. When relying on the technique of individuating semantic meaning in terms of abstraction from the combination of known and unknown expressions to known meanings (in the spirit of Frege's context principle), this feature proves a major obstacle to the semantic analysis of imperative clauses (see Section 2).

However, from the late 1990s on, data from more and more languages have been adduced to shed doubt on a general ban against imperative embedding. The cases come from at least the following areas: conditional imperatives, imperatives in conditional conjunctions and disjunctions, imperatives in speech reports, and imperatives in relative clauses, which will be discussed in turn. Following the major part of the literature, I will set aside regular conjunctions and disjunctions of imperatives as exemplified in (32):

(32) a. Call your grandmother and fill the birdfeeder, please.
b. Call your grandmother or fill the birdfeeder, please.

The possibility of conjoining and disjoining imperative clauses has never been doubted. The disjunction, however, has been argued to generate a free choice inference (Ross's paradox)

[28]Differences can be found specifically with non-monotonic modification that leads to a weakening of the canonical force; see Lauer 2013 for general discussion, and Rudin 2018 specifically for an account of imperatives with rising intonation.

as familiar from modal verbs as well (see Section 2.3 above, and Kaufmann 2016b for extensive discussion). Provided with a suitable treatment of this issue with disjunctions, the examples in (32) could also be treated as a morphological reflex of a single imperative operator outscoping two non-modal propositions or properties, in which case they would not constitute an instance of syntactic or semantic imperative embedding (see, however, Starr 2011 for arguments against such a move and for a dynamic semantic analysis). In the following, I will thus concentrate on more controversial cases of potential imperative embedding. After an initial phase of discussion that focuses mainly on proving their existence in various languages, the more recent literature turns to illuminating specific restrictions observed for such constructions as well as devising accounts that allow for unified treatments with unembedded imperatives. Another challenge that results from these more recent findings and still remains to be addressed in satisfactory detail is the question of why, in certain environments, some languages but not others allow for the embedding of imperatives.

5.1.1 Conditionalized imperatives

Like coordinated imperatives, imperatives in the consequents of conditionals constitute an exception to the ban on imperatives as appearing as parts of larger expression. However, the syntactic and semantic make-up of conditionals leaves room for assuming different degrees of embedding in sentence-level compositional semantics or suprasentential representations.

Schwager (2006a) argues that all major types of conditionals allow for imperative consequents: (33) exemplifies what are most naturally read as genuine hypothetical conditionals, relevance (or biscuit) conditionals, and factual conditionals, respectively.

(33) a. If you get lost, call me. **hypothetical conditional**
b. If I may be honest, better call him as soon as possible. **relevance conditional**
c. If you like him so much, then go ahead and help him! **factual conditional**

Proposals for how antecedent and consequent combine in relevance and factual conditionals differ widely, independently from the clause type of the consequent (cf. Bhatt & Pancheva 2006). Therefore, I will focus on hypothetical conditionals in the following. According to standard assumptions in formal semantics, they express quantification over a suitable set of possible worlds that is induced either by an overt or covert modal in the consequent (see Kratzer 1991), by *if* itself (Gillies 2010), or by a silent distributive element in the consequent (Schlenker 2004). Drawing on a modal semantics of imperatives, Schwager (2006a) and Kaufmann & Schwager (2011) apply Kratzer's theory of conditionals to conditionals with imperative consequents. Kaufmann (2016a) points out that imperative conditionals can also occur in anankastic conditionals and that Condoravdi & Lauer's 2016 account for anankastic conditionals with modal verbs carries over directly to imperative variants as in (34).[29]

(34) If you want to go to Harlem take the A-train.

Schwager (2006a) points out that imperatives, like modal verbs (Roberts 1987; Frank 1996), allow for evaluation with respect to a previously introduced hypothetical possibility. Unlike standard modal subordination with epistemic modals (cf. (35a)) and in line with what can be

[29]Condoravdi & Lauer (2017) reject the modal analysis for imperatives and suggest an overall different treatment of conditional imperatives.

observed for deontic modals (cf. (35b)), imperatives require an overt anaphor like *then* or *in that case* (cf. (35c); all examples adapted from Schwager 2006a).

(35) Mary might buy a lottery ticket$_i$. ...

a. She's such a lucky person, it$_i$ might be worth millions.

b. #(In that case,) Bill should keep it$_i$, he's such a careful guy.

c. #(In that case,) try to find out its$_i$ number.

Modal subordination as evaluation with respect to a hypothetical possibility given in the immediate linguistic context (in (35), Mary's buying a lottery ticket) is similar to how the consequent of a hypothetical conditional like (33a) is related to the possibility that is introduced in the antecedent (there, your getting lost).

5.1.2 Speech reports

The majority of examples that have been discussed for embedded imperatives are speech reports. It is, of course, unsurprising that imperatives, like any other linguistic material can be quoted (direct speech), exemplified in (36). The main challenge for this type of example is therefore to show that they indeed constitute instances of indirect speech. Evidence for true embedding involves the presence of non-quotational complementizers (Old Germanic and Scandinavian languages, Rögnvaldsson 1998; Slovenian, Sheppard & Golden 2002; cf. (37a)), syntactically mediated semantic dependencies (binding, cf. (37b); association with focus, Crnič & Trinh 2009a,b), as well as the interpretation of indexicals ((37c) in comparision to quotational (36)).

(36) John said: 'Help me!' (≈ 'John said that you should help him.')

(37) a. Rekel je, da poslušaj!
said.MASC.SG is that listen.IMP.2P.SG
'He said that you should listen.' Slovenian, Stegovec & Kaufmann 2015:(5b)

b. Every professor$_i$ said buy his$_i$ book. Crnič & Trinh 2009b:(7a)

c. John said help me. (≈ 'John said that you should help me.', i.e. *John* ≠ *me*)

As more and more languages are shown to allow for imperatives to occur embedded in indirect speech, it is important to emphasize that the traditional view did not come out of nowhere. Embedded imperatives pattern with other so-called embedded root phenomena (Hooper & Thompson 1973): while undoubtedly acceptable in many languages, they are considerably more constrained than embedded declaratives or interrogatives. Restrictions that have been discussed so far regard in particular (i) the choice of matrix predicates (possibly only *sagen* 'say' in German, Kaufmann & Poschmann 2013; *say* or *tell* in English, Crnič & Trinh 2009b; but: any directive verb in Slovenian or Korean, Portner 2007; directive and desire predicates in Turkish, Oikonomou 2016:156), (ii) the syntactic realization of the embedded clause (presence of a complementizer, Rögnvaldsson 1998; Stegovec & Kaufmann 2015), and (iii) person parameters (Kaufmann & Poschmann 2013, Stegovec t.a.). Note that while particular types of restrictions recur across languages, none of them has, so far, been claimed to be universal.

The interpretation of imperatives embedded in speech reports parallels that of embed-

ded declaratives with overt deontic modals (displaying concord, i.e., not adding their own layer of modalization) or infinitivals (to the extent that they are acceptable under the relevant matrix predicates). These data are thus easy to analyze for an account that likens imperatives to deontic modals (e.g. Kaufmann 2012, see Section 4.2). Accounts that rely on non-propositional objects have to adopt specific principles about semantic composition and/or a certain amount of polysemy of the matrix predicates (cf. Portner 2007 for a *To-Do List*-based theory of imperatives in indirect speech).

Stegovec (t.a.) observes that Slovenian imperatives embedded in speech reports display restrictions against coreference between subjects in main and embedded clauses (cf. (38)). A similar effect is well-known for specific types of attitude reports in Romance, exemplified in (39) for Spanish (from Quer 2006:662), and discussed as a **(subject) obviation effect**.

(38) a. *Rekel si$_i$, da si pomagaj$_i$.
said.M are.2 that REFL.DAT help.IMP.(2)
int.: 'You said you should help yourself.' (e.g., reporting a previous utterance by the addressee: 'I should really help myself!') Slovenian, Stegovec t.a.:(8)

b. Rekel (ti$_i$) je$_k$, da mu$_{k,l}$ pomagaj$_i$.
said.M (2.DAT) is that 3.M.DAT help.IMP.(2)
'He$_k$ said (to you$_i$) you$_i$ should help him$_{k,l}$. Slovenian, Stegovec t.a.:(9)

(39) Queremos$_i$ que { ganen$_k$ / *ganemos$_i$ }.
want.1PL that { win.SBJV.3PL / win.SBJV.1PL }
'We want them/*us to win.' Spanish

Stegovec relates this to the crosslinguistic absence of first person singular imperatives: the imperative subject may not corefer with the source of the direction, a role played by the utterance speaker for main clause imperatives, and the referent of the matrix subject for embedded imperatives. He considers this evidence that imperative clauses syntactically encode the 'source' of the modality, which, in matrix clauses is equivalent to the speaker, but, in embedded clauses, switches to the referent of the matrix subject.[30] Stegovec argues moreover that analogous patterns can be found with directive subjunctives, which in Slovenian are used to request, command, or advise that a course of events be taken that is described with first person exclusive and third person subjects. These findings also constitute motivation for a paradigm of **directive clauses** that encompass both canonical imperative clauses and cases with non-second person subjects (see also Section 5.2.1).

5.1.3 Imperatives in (restrictive) relative clauses

Imperatives have been shown to be acceptable in non-restrictive relative clauses at least in Ancient Greek, Latin, and possibly English, but these are precisely constructions that seem to a certain degree independent of their surrounding context (see van der Wurff 2007:23-25). However, in the more recent literature, at least Ancient Greek (Medeiros 2013) and

[30]Further evidence for this claim is provided by patterns from regular interrogatives vs. so-called scope-marking interrogatives (Stegovec 2017 and references there). In contrast, Isac (2015) does not see evidence of synactic encoding of the speaker (source of direction) in imperative clauses. Based on different considerations, Alcázar & Saltarelli (2014) argue that the speaker should be encoded syntactically in all clause types, pushing for a version of the explicit performative hypothesis in contemporary minimalist syntax (see also Speas & Tenny 2003).

Slovenian (Sheppard & Golden 2002) have been found to allow for imperatives in restrictive relative clauses. (40) is taken from Kaufmann & Stegovec (t.a.) (their (2b)):

(40) To je vino$_i$, **ki** ga$_i$ spi**j**, in to je vino$_j$, **ki** ga$_j$ zli**j**.
this is wine.N **REL** 3.ACC drink.**IMP** and this is wine.N **REL** 3.ACC spill.**IMP**
'This is the wine you should drink and this is the wine you should spill.' Slovenian

Kaufmann & Stegovec (t.a.) argue that this rather outlandish phenomenon should not be considered evidence that the so-called Slovenian imperative forms are semantically different from canonical morphosyntactically marked imperatives in other languages. They show that imperatives in relative clauses robustly display restrictions associated with main clause imperatives as well. For instance, the imperative marked relative clause becomes infelicitous if it is contextually implausible that the relevant course of events can be carried out, see (41a) vs. (41b) (their (12a) vs. (12b)):

(41) a. #Knjiga$_i$, ki jo$_i$ kupi, je razprodana.
book$_i$ that her$_i$ buy.IMP.2P.SG is sold out
'The book which you should buy is sold out.'

b. Knjiga$_i$, ki jo$_i$ kupi takoj, ko bo na voljo, še
book$_i$ which her$_i$ buy.IMP.2P.SG immediately when will on available yet
ni izšla.
not out
'The book, which you should buy as soon as its available, is not out yet.'

Moreover, restrictive relative clauses are shown to anchor only to definite descriptions or indefinites under specific readings.[31] Stegovec & Kaufmann (2015) observe that German also allows for imperative verbs in relative clauses with main clause verbal order (Verb Second, V2). German V2 relatives are generally argued to display a restrictive interpretation (Gärtner 2001). This carries over to their imperative variants, but they display a different pattern in distribution from Slovenian imperative relatives.[32]

Propositional analyses of imperative clauses extend to these examples naturally, while additional assumptions will be needed to integrate non-propositional objects. At the same time, propositional analyses overgenerate heavily in predicting that imperatives could be available freely in restrictive relative clauses. Medeiros (2013) argues that the possibility to embed imperatives correlates with a rather rich inflectional paradigm, encoding for instance differences in person and number marking. While this does not seem to hold true for reported speech, it seems compatible with what is observed for restrictive relative clauses. Drawing on the specific restrictions they observe for the formally flexible Slovenian, Kaufmann & Stegovec (t.a.) argue that restrictive relatives give rise to failure of binding into presuppositions which Slovenian can, in some cases, remedy by the use of resumptive pronouns.[33]

[31] See Kaufmann & Stegovec (t.a.) for specific exceptions with quantificational anchors.

[32] Endriss & Gärtner (2005) analyze German declarative V2 relatives as sentence-internal additions to a newly introduced discourse referent.

[33] This idea, however, does not extend to Ancient Greek, which does not display resumptive pronouns in the relevant examples.

5.1.4 Conditional coordinations

In many languages, imperatives have been observed to occur as the first clauses of conjunctions and disjunctions, which receive conditional interpretations (Bolinger 1967; Clark 1993). For instance, (42a) specifies a consequence of taking a step to the left (cf. (42a)), and (42b) specifies one of not doing so. Schwager (2006b) dubs these constructions **imperatives and declaratives** (IaDs) and **imperatives or declaratives** (IoDs), respectively.

(42) a. Take a step to the left and you'll fall down the stairs.
b. Take a step to the left or you'll fall down the stairs.

For English, some instances may be considered bare VPs (Russell 1905) or different types of reduced declaratives, but this cannot be maintained in general and in particular not for languages with more distinct morphosyntactic marking (Bolinger 1967). The cases with imperatives appear to be a specific instance of conditional coordinations as discussed by Culicover & Jackendoff (1997). NPs, declaratives, and (for conjunctions) declaratives with sufficiency modals appear to give rise to similar effects, as exemplified in (43a), (43b), and (43c), respectively:

(43) a. One more beer and/or I'll fall down the stairs.
b. You give me just one more beer and/or I'll fall down the stairs.
c. You only have to give me one more beer and I'll fall down the stairs.

Upon closer inspection, conjunctions and disjunctions differ considerably: while the conjunctions can be truly hypothetical, the first coordinands of disjunctions retain some sort of independent discourse functions. Specifically, IoDs function like imperatives followed by the specification of a negative consequence for the case of non-compliance, rendering (42b) functionally equivalent to (44):

(44) Take a step to the left! If you don't take a step to the left, you'll fall down the stairs.

No such effect occurs for conjunctions; IaDs (like the other types of conditional conjunctions) can be interpreted as purely hypothetical. Kaufmann (2012) showcases this with sequences of incompatible first coordinands.

(45) a. Take a step to the left and you'll fall down the stairs; take a step to the right and the fan will hit you.
b. #Take a step to the left or you'll fall down the stairs, take a step to the right or the fan will hit you.
c. #Take a step to the left; take a step to the right.

While the IaD version in (45a) is felicitous (if disheartening), the IoD version in (45b) displays the same awkwardness inherent to conflicting stand-alone imperatives as in (45c).[34] Kaufmann (2012) and Keshet & Medeiros (2018) discuss a battery of further phenomena that corroborate the contrast. IoDs thus pattern with stand-alone imperatives on aspects crucial

[34]Note that there is an intonational contour (lack of final fall) signalling lack of commitment on which (45c) (possibly followed by *what do I care!*), can be used to signal the speaker's indifference with regard to what the addressee chooses to do. Saving (45b) along these lines seems impossible.

to the semantics of imperatives. The main challenge posed by IoDs is therefore to provide an analysis that combines one's semantics for imperative clauses with independently motivated assumptions about disjunctions. IaDs, in contrast, appear to lack all crucial aspects of stand-alone imperative meaning.

While the semantic findings about IaDs may at first glance suggest excluding them from an analysis of imperative clauses, the construction is too frequent cross-linguistically to consider it a mere accident. In fact, von Fintel & Iatridou (2017) consider IaDs an argument in favor of a non-modal semantics of imperatives, like Portner's properties. Han (2000) and Oikonomou (2016), who both assume a modally more involved semantics for imperatives, assume that imperative morphology signals the presence of a higher operator and does not, in itself, encode the imperative specific meaning. For IaDs, they argue that a defective directive operator or a special conditional operator can play the relevant role. The modal approach in Han 1999 captures IaDs straightforwardly in that it interprets all imperatives like conditional antecedents (with positive consequences understood for regular imperatives; a related idea is spelled out in Eckardt 2011). Kaufmann (2012) suggests that the imperative modal operator itself can play the role of the conditional operator that can get restricted by its own prejacent. While amounting to the right quantificational structure and receiving some support from a focus-driven split into restrictor and nuclear scope, this requires the ad hoc stipulation that IaD-imperative modals can receive epistemic interpretations. Moreover, Keshet (2013) shows that an approach along these lines fails to capture the behavior of adverbial quantifiers in the consequent, which appear to outscope the conditional operator as in (46):

(46) Eat one of her cookies and you're usually sick for weeks.

Approaches that rely on a weak semantics for imperatives appear to have an advantage: they do not need to get rid of unwanted modal information in IaDs. They have to offer an account however for both the embedding behavior and the discourse behavior of IaDs. Unlike ordinary conditionals, IaDs cannot be embedded freely in attitude or speech reports and the like. According to von Fintel & Iatridou (2017), this is to be expected because the embedding profile of conjunctions is generally regulated by their first conjunct. However, IaDs also differ in their discourse profile: they seem less felicitous than ordinary conditionals for purely descriptive speech acts and instead carry some (additional) expressive flavor. More recently, Keshet & Medeiros (2018) adduce experimental evidence to show that IaDs are felicitous only in contexts that evaluate possible future behavior of the addressee; no such restriction holds for conditionally read conjunctions of declaratives with declaratives. The contrast would be unexpected if imperatives did not conventionally encode reference to action choices.

5.2 Canonical imperatives and surrogate forms

In many languages it is relatively straightforward to individuate a canonical imperative clause associated with specific morphosyntactic properties. By the very criterion used to individuate it–designed for requesting and commanding–this determines that speaker and addressee are involved in that (i) the speaker constitutes the source of a direction, and (ii) the addressee is asked to bring it about that they carry out the action described. Naturally, canonical imperatives thus come with (understood) second person subjects. Much of the earlier linguistic literature focuses on the question of how, if at all, the connection to the two speech

act participants is encoded linguistically. In contrast, much of the more recent literature addresses the question of person marking in light of the observation that in some languages, canonical morphosyntactic imperatives appear to form paradigms with verbal inflections that serve to instigate joint action between the speaker and the addressee ('(ex)hortatives', 'first person (plural) imperatives') or aim at bringing it about that a third person carries out an action (Zanuttini 2008 discusss Bohjpuri as an example in question). The picture is complicated further in that morphosytactic imperatives can alternate with other forms for what appear to be syntactic reasons (the presence of negation) or can optionally be replaced by surrogate imperatives (infinitivals, participles, subjunctives,...) that overlap with imperatives in their functional spectrum (Isac 2015). Regarding the involvement of the addressee, this reveals an important distinction between (ii-a) the addressee as the person who is supposed to carry out the action named in the prejacent (or have the property named in the prejacent)–the **subject**, and (ii-b) the addressee as the person who is supposed to ensure that the prejacent is realized (the *see to it that*-component of imperative meaning, Belnap et al. 2001)–the **controller**. These two aspects typically coincide for canonical morphosyntactic imperatives, and a very narrow understanding of the task of providing a semantic analysis for imperative clauses could thus retreat to reserving 'imperative' for a morphosyntactic form that involves both aspects. However, in the following, I will highlight a couple of phenomena that in the more recent linguistic literature have led to the consensus that a satisfactory investigation of imperative clauses cannot entirely set aside cases that do not neatly bundle together the two types of addressee involvement (see Alcázar & Saltarelli 2014 for particular emphasis). Section 5.2.1 discusses a series of issues relating to the supposed second person marking of subjects in canonical morphosyntactic imperatives, Section 5.2.2 hightlights a few semantically relevant aspects of surrogate imperatives.

5.2.1 Subjects in canonical morphosyntactic imperatives

Canonical morphosyntactic imperatives are special in that they can lack overt subjects even in languages that require subjects with finite indicative or subjunctive verbs to be realized overtly (in contrast to null-subject languages, Chomsky 1981). However, these covert subjects can alternate not only with overt second person pronouns but also with expressions that are usually taken to be marked as third person. Imperative morphosyntax has been discussed as occurring with quantificational subjects in languages like German, English, or Japanese:[35]

(47) a. Nobody move!

b. Geh da mal keiner rein!
go.IMP2PSG there QPART nobody in
'Nobody go in there!' German

c. { Dare ka/ Minna } ga ugok-e.
{ someone/ everyone } NOM move-IMP
'Somebody/everybody move!' Japanese,
from Kaufmann & Tamura's (under review) (53b)

Schmerling (1982) observes that such cases differ from declaratives used for commanding or requesting: only for the imperative subject, the quantificational domain is constituted by

[35]The negative quantifier most obviously rules out a construal as a vocative. See Zanuttini (2008) for discussion and further criteria for disambiguation (for instance, prosody).

the referent of a second person plural pronoun, i.e. a plural addressee (either a physically present plurality or the single person talked to together with the group they are associated with contextually). In (48), calling services is an acceptable response to (48a), but not to (48b), which requests that one of the employees take to the work themselves.

(48) (*Context: boss to a room full of employees:*)

a. Somebody has to fix the printer.

b. Somebody fix the printer.

Schmerling's contrast suggests that the relation between imperative subject and the addressee cannot be derived from pragmatical considerations of what it means to issue a directive speech act. In line with this, Zanuttini (2008) (see further references there) emphasizes that quantificational imperative subjects can bind second person pronouns:

(49) Everyone$_i$ raise (his$_i$/her$_i$/their$_i$)/your$_i$ hand!

Morphosyntactic imperatives can also take subjects that are free relatives, definite descriptions, or, especially in list contexts, proper names (Downing 1969; Potsdam 1998):

(50) a. Whoever wants to dance get himself a partner and let's begin. Bolinger 1967, p. 336

b. Dani sit by the tree, Gabriel stand by the door! Zanuttini 2008:(21a)

Data along these lines are typically taken to constitute evidence that canonical imperative morphosyntax involves the presence of second person features that are shared with the overt subject to constrain its reference or domain of quantification. Downing (1969) concludes that imperative subjects (or their quantificational domains) must stand in a subset relation to the set of addressees (**Downing's Generalization**).[36]

Despite its intuitive appeal and contrasts as in (48), Potsdam (1998) and Zanuttini (2008) reject the conjecture for English, building on examples like (51) that suggest that the addressee (the maître d') is exempt from the quantificational domain of the subject.[37]

(51) Maître d', someone seat the guests.

What Zanuttini takes to be crucial for imperatives is just the controller-property (see (ii-b) above), namely that the addresseee is supposed to make sure that the prejacent is brought about. However, even this weaker form of addressee-relatedness does not go uncontested: for some speakers, 0-place predicates are acceptable in imperative form, cf. (52).

(52) Rain!/Don't rain!

Finally, accounts that aim to maintain a second person restriction on imperative subjects have to explain its shifty behavior in echo questions that do not literally copy a preceding utterance. Bolinger (1967:p.336) observes that English echo questions involving imperatives

[36]Languages differ in the type of restriction imposed. Kaufmann (2012) argues that English allows for the domain to be constituted by a subset of the addressees, whereas German requires it to be identical to the plural addressee (banning definite descriptions, free relatives, and proper nouns as imperative subjects).

[37]Potsdam (1998) and Zanuttini (2008) extend their claims to referential subjects; see their works for examples and discussion.

can optionally contain first person reflexives if the actual speaker is the original addressee of the imperative, cf. (53).[38]

(53) A: Don't kill yourself! – B: Don't kill {myself, yourself}!? What do you mean?!

Under an analysis of echo questions as speech reports, these data can be seen as an argument that the person features of the addressee of the imperative speech act (either the utterance addressee or the original addressee of the utterance that is being reported) are realized on the imperative subject (see Kaufmann & Poschmann 2013).

5.2.2 Addressee involvement in suppletive and surrogate imperatives

In many languages, infinitivals, subjunctives, or participles, can under certain conditions appear in the place of imperative clauses (**surrogate imperatives**, Isac 2015).

In some cases, these forms are used to avoid incompatibilities with clausemate negation (see Section 5.3) or in embedded positions as in (54) (in contrast, see Section 5.1 for canonical morphosyntactic imperative marking in embedded positions).

(54) a. John told you to eat. *'to'-infinitival*
b. John requested that you eat. *subjunctive*
c. The dish to eat is this one. *infinitival relative clause*, Bhatt (1999)

Special form types along these lines can also be used to break the link between the two aspects of addressee involvement discussed above in that they can express requests to the second person to see to it that a prejacent proposition expressed with a non-second person subject comes true. Zanuttini et al. (2012) illustrate such a use for the English *let*-construction ((55a); their (5)).[39] They contrast this with Bhojpuri (55b) (their (6b)), which, to express this meaning, uses a verbal form that belongs to the same morphological paradigm as the second person imperative marker.

(55) a. Let the table be clean!
b. Tebulwa: sa:ph rahe!
table-NOM clean-NOM be-IMP3Sg

Bhojpuri

[38] Bolinger himself sets these data aside, but Mastop (2005) aims to include them.

[39] A similar point is illustrated by Isac (2015) for Romenian with (i) (from a folk tale). Here, a sequence of instructions to a farmer is realized with imperative morophology in the clause whose subject refers to him, and with subjunctive morophology where the subject refers to another individual.

(i) Să vii mâine cu fata la curte. Să fie nici
SBJ.PRT come.SUBJ.2SG tomorrow with girl.DEF at court SUBJ.PRT be.SUBJ.3SG neither
îmbrăcată, nici dezbrăcată, nici călare, nici pe jos, nici pe drum, nici pe lâng drum.
dressed, nor undressed, neither riding nor on ground, neither on raod, nor on near road'.
Bring her to the court tomorrow. She must be neither dressed, nor undressed, neither riding a horse, nor walking, neither on the road, nor off the road. Romanian, from her (175)

All clauses in this sequence name events whose realization the farmer (the addressee) is supposed to ensure. This suggests that we should consider Romanian subjunctives a form of surrogate imperatives that enodes only the *see to it that*-component of the meaning of canonical morphosyntactic imperatives, while the subject of the prejacent can be second or third person.

In some cases, surrogate forms and canonical morphosyntactic imperative can be exchanged for each other while keeping the speech act more or less the same. For some forms, this holds true of the entire functional spectrum of imperative clauses, including more marginal uses like acquiescence or conditional conjunctions (cf. Section 3.2). A case in point is the Hebrew future, which, in fact, seems to be gaining ground over the regular morphosyntactic imperative especially in less formal registers:[40]

(56) A: Nihiya xam po. Efshar liftoax et ha-xalon?
became hot here possible INF-open OM the-window
'It's getting warm. Can I open the window?
B: Betax. { Tiftexi / tiftax /
sure { FUT-open-FEM/ FUT-open-MASC/ IMP-open-FEM /
pitxi / ptax }
IMP-open-MASC }
'Sure, go ahead. Open it!'

In other cases, the functional spectrum of the surrogate forms seems more restricted (von Fintel & Iatridou 2017, Oikonomou 2016). While the possible sources are ill-understood, there appears to be a stable class of **strong directives**[41] that can be used as orders, requests, warnings and the like, but not for suggestions, advice, to express acquiescence, or in the antecedents of conditional conjunctions. Cases in point are infinitivals in German or Hebrew, as well as stand-alone 'that'-clauses with German *dass* and Balkan (e.g. Serbian, Slovenian) *da*, or Albanian *të* + subjunctive.[42,43]

In contrast, Greek *na* subjunctives allow for the full functional spectrum familiar from canonical morphosyntactic imperatives. In this language, the canonical morphosyntactic imperative seems more constrained as it can only be used with actions that are assumed to be under the control of the addressee, cf. Oikonomou (2016) (her (41a,b)):

[40]Thanks to Dorit Bar-On, Itamar Francez, Yael Sharvit (all p.c.) for judgments and discussion of Hebrew data.

[41]von Fintel & Iatridou's 2017 term.

[42]For discussion of relevant data, I am indebted to Željko Bošković, Ivana Jovović, and Una Stojnić (Serbian), Adrian Stegovec (Slovenian), and Dalina Kallulli (Albanian).

[43]A slightly different pattern emerges for German past participles as in (i), which cannot be used for acquiescence or advice, but can appear in conditional conjunctions (see (ib) from Kaufmann 2018, her (66)):

(i) a. Aufgepasst!
be-attentive.PP
'Pay attention!' (ok: command, request, warning, . . . ; not: advice, acquiescence, suggestion,. . .)
b. Einmal nicht aufgepasst, und schon hat man eine Eintragung ins Klassenbuch
one.time not be-attentive.PP and already has one an entry into class register
abkassiert!
gotten
'Don't pay attention just one time and you've earned yourself an entry into the class register.'

German past participles constitute a counterexample to von Fintel & Iatridou's 2017 generalization (their (86)) that any form that can appear in the first conjunct of a conditional conjunction can also express acquiescence.

Note that, in addition to restrictions on the speech acts they can serve for, imperative-like uses of past participles also underly restrictions relating to verbal class and adverbial modification (Heinold 2013).

(57) a. Na perasis omorfa!
SUBJ pass.2SG nicely
'Have a good time!
b. #Perna omorfa!
pass.IMP nicely
(marignally acceptable as advice)

A last case to be considered in this connection are declaratives in plain indicative non-past or future tenses (like English *will* and *is going to*) that can be used for directive functions, similarly to strong directives, but typically in full ambiguity with descriptive uses. By default, this kind of ambiguity appears to constitute an argument in favor of a pragmatic derivation of the directive uses. However, for Japanese non-past *-ru*, Ihara & Noguchi (2018) present arguments in favor of a covert modal operator present in the directive, but not the descriptive uses.

More research involving better controlled scenarios and more carefully individuated form types will be needed to obtain a better understanding of the exact semantic contribution of different surrogate imperatives and the patterns of semantic and pragmatic variation of their distribution both within and across languages. The splits in what part of the functional spectrum associated with canonical morphosyntactic imperatives can be covered by particular suppletive forms promise to be highly indicative of how the directive and expressive meanings associated with imperative-like forms are best analyzed as arising from conventional meaning and pragmatic principles.

5.3 Imperatives in interaction with negation, tense, and aspect

In many languages of the world, imperative clauses display specific interactions with other grammatical categories like negation, as well as temporal and aspectual oppositions. While some of these phenomena have received extensive attention in the syntactic literature on imperative clauses, their relation to the semantic aspects of imperativity is still relatively ill-understood.

Prima facie we might expect imperative clauses to result from positive and negative sentence radicals alike. This is indeed what we find for instance in German or Polish, cf. (58).

(58) a. Arbeite nicht!
work.2SG.IMP NEG
'Don't work' German
b. Nie pracuj!
NEG work.2SG.IMP
'Don't work' Polish

Extensive typological surveys (van der Auwera et al. 2013) show that the possibility of combining regular imperative marking with regular propositional negation) is far from uncommon. However, a significant number of languages display particularities in the interaction between negation and imperatives, resulting in some cases in the regular negation together with a suppletive form (infinitval or subjunctive, as in Spanish (see (59)).

(59) Lee! — No { leas / *lee }!
read.2SgImp — NEG { read.2Sg.Subj / read.2Sg.IMP }

'Read!' — 'Don't read!' from Zeiljstra 2006:his (3)

Other languages employ special negative markers together with canonical second person imperative morphology or also with a suppletive form. While a specialized directive negation may appear to constitute a semantic phenomenon, in that the negative marker itself encodes some of the prioritizing meaning associated with the imperative (Postma & van der Wurff 2007), suppletive forms in the presence of an all-purpose sentential negation are standardly treated as a syntactic phenomenon (Zeiljstra 2006; Isac 2015).

Finally, assumptions about the clausal architecture or else the particular semantics associated with imperatives have to ascertain that the clause-type specific meaning itself cannot be outscoped by negation or cannot be interpreted in its scope.

Imperative clauses have also been claimed to lack alternations in temporal and aspectual morphology. For instance, imperatives typically lack temporal oppositions and can only combine with present or future oriented adverbials. However, instances of compatibility with past tense adverbials or past marking in imperatives have been shown to express reproaches in languages like Japanese, Dutch, and Catalan Sign Language (see Section 3.2 above). Aikhenvald (2010:129-133, and references there) offers examples from the North American languages Takelma and Fox that mark grammatically whether the prejacent is to be carried out in the immediate or the more distant future. Murray (2016) discusses additional pragmatic effects of a similar semantic contrast as observed in Cheyenne.

Finally, imperatives are sometimes claimed to be impoverished in the aspectual oppositions they realize. On the one hand, imperatives are typically used to request that an action be performed completely, which may result in a prevalence of perfective marking. However, when controlling for independent restrictions on the use of imperfective, it may be perfectly felicitious, cf. (60).

(60) Be waiting at the gate when she gets there. Schwager 2011:(3c)

Furthermore, Slavic imperatives under negation have been noticed to typically realize imperfective aspect. However, Alvestad (2013) argues that imperfective marking is a general strategy of anaphoricity that, moreover, is used to varying degrees in different Slavic languages. She analyzes negated contexts as just one type of event anaphoricity that is typically reflected in imperfective marking.

6 Conclusion

In this chapter I have given a brief overview of the phenomenon of imperative clause type marking and the puzzles it poses for semantic theorizing. I have aimed to discuss the main ideas of how to capture the meaning of such sentences, what problems they face, and how to integrate the resulting proposals into an overall theory of meaning. I have concluded this discussion with glimpses into a couple of topics relating to imperative clauses that are currently receiving heightened interest in semantic theorizing and that will hopefully help to further elucidate the semantics of imperative clauses.

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