

Magdalena Kaufmann

Imperative clauses

Abstract: This chapter introduces imperatives as the class of sentential form types in natural languages that are prototypically associated with the speech act of ordering. I show that imperatives serve for a crosslinguistically stable, but in itself diverse range of speech acts, which makes it challenging to find a common conventional core meaning that would explain the pattern. I discuss specific issues relating to the absence of intuitively accessible truth-values and restrictions on embedding. I then turn to a brief overview of syntactic assumptions about imperatives in general, before considering the status of grammatical categories like subject marking, tense and aspect, and negation in imperative clauses in more detail. Finally, I consider instances of imperative marking as occurring in embedded positions, as well as form types appearing in similar and typically smaller ranges of related functions.

Keywords: sentential mood, clause types, speech acts, modality, clausal embedding, obviation, free choice, surrogate imperatives

1 Introduction

Natural languages tend to mark a sentential form type that is prototypically associated with the canonical functions of ordering and requesting and is considered the respective language's *imperative clause* (Aikhenvald 2010; Kaufmann 2012, 2021). Some examples are given in (1). Depending on the language, these forms are marked by verbal inflection (compare Japanese (1b)), clause typing particles (compare

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Magdalena Kaufmann, University of Connecticut, 365 Fairfield Way, Storrs, CT 06268–1145,
email: magdalena.kaufmann@uconn.edu

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Korean (1c)),¹ prosodic marking (described for Cree in Sadock and Zwicky 1985, see also Aikhenvald 2010), or combinations of several strategies (verbal inflection and fronting in German (1d)). For languages like English and German that do not otherwise allow for covert subjects in finite contexts (non *pro drop* languages), the potential absence of an overt subject serves as a further identifying criterion.

- | | | |
|--------|---|----------|
| (1) a. | <i>Read this book!</i> | English |
| b. | <i>Kono hon-o yom-e!</i>
this book-ACC read-IMP | Japanese |
| c. | <i>I chayk-ul ilk-ela</i>
this book-ACC read-IMP | Korean |
| d. | <i>Lies dieses Buch!</i>
read.IMP this book | German |

Sentential form types of this sort can be contrasted with declaratives, which are canonically used for assertions, and interrogatives, which are canonically used for (information seeking) questions. Together, these three constitute the paradigm of a language's major clause types (Sadock and Zwicky 1985). We thus use an intuitive connection between forms and canonical conversational functions to identify the respective clause types. On the assumption that this link is established by conventional meaning, the relevant differences in morphosyntactic and possibly phonological form have to be associated with differences in conventional meaning, and a comprehensive theory of natural language semantics should be able to explain this.²

It is worth pointing out that this conception of “imperative”, while standard in linguistic theorizing, differs from what other fields, as for instance philosophy of action, deontic logic, or artificial intelligence may associate with this term. These fields often seek to elucidate properties of the notions of commanding and requesting independently of linguistic encoding, and employ “imperative” for any expres-

¹ Despite their superficial similarity, the Japanese imperative marker is a verbal suffix alternating with tense or conditionals morphemes, the Korean clause-final marker alternates with obligatory markers for other clause types (Pak 2008).

² Portner (2018b) distinguishes between *sentence mood* as an “aspect of linguistic form conventionally linked to the fundamental conversational functions within semantic/pragmatic theory” (p. 122), and *clause types* as “grammatically defined classes of sentences which correspond closely with sentence moods” (p. 122). Embedded clauses can, for instance, be interrogative in terms of clause type but are not taken to have sentence mood as they “do not perform the function of asking a question” (p. 123). In section 5, I will show that embedded imperative clauses that are not associated with an actual conversational function of their own can retain aspects of the conversational functions associated with their unembedded occurrences. For this reason, I do not adopt Portner's terminological distinction.

sions used to carry out such functions (e.g. Ross 1967; Hamblin 1987). It is moreover helpful to keep in mind that in linguistics “imperative” is also used for specific verbal morphology that seems constitutive of a language’s imperative clause type. Where needed to avoid confusion, I will use “imperativized verb” or “imperative morphology” for such forms. The course of events (or state of affairs) commanded or singled out by the imperative as optimal in some other relevant sense will be called the *prejacent* (e.g., for (1), the prejacent is the proposition that there is an event of the addressee reading this book).

Understanding the morphological and syntactic properties of imperative clauses and how they come to encode the meaning that conventionally relates them to their canonical functions of commanding and requesting meets with various challenges that I will try to elucidate in the following. Section 2 discusses challenges and ideas for capturing the conventional meaning of imperative clauses (i.e., their semantics). Specifically, 2.1 explains the range of non-canonical speech acts also associated with imperatives and the problems they pose for a unified semantic theory, 2.2 introduces crucial complications imperatives pose for standard semantic theories and the main types of responses found in the literature, 2.3 introduces a few recent theories, and 2.4 discusses issues arising from distinctions in illocutionary strength. Section 3 turns to the morphosyntactic peculiarities of imperatives. Section 4 discusses the interface between form and meaning with respect to subject marking, tense and aspect, and negation, three clusters of phenomena that are considered particularly revealing regarding the syntax-semantics interface of imperatives. Section 5 turns to imperatives embedded in larger expressions in 5.1, and to minor directives in 5.2, as two topics that promise novel insights into the formal and interpretational properties of imperative clauses.

2 The semantics of imperative clauses

2.1 Imperatives and speech acts

Having individuated imperatives as a crosslinguistic category based on their prototypical conversational function of ordering or requesting, it suggests itself to construe their conventional meaning as an association with these particular conversational functions. Following the philosophical tradition, I will refer to conversational functions at this level interchangeably as *speech act types* or *illocutionary forces*. Focusing on orders for concreteness, we can note that varying characterizations of the aspects constitutive of such illocutionary forces are provided in different works of classical speech act theory (Austin 1962; Searle 1976; Searle and Vanderveken

1985; see Portner 2018b and Green 2021 for overviews). Without committing to any specific such taxonomy, when imagining a natural use of English (2), we most likely take it to be associated with a series of features that would merit characterizing it as an order:

- (2) [Speaker S to addressee A:] *Close the door!*
 (Intuitively:) When uttering (2) as an order, S conveys:
- a. S wants that A closes the door (*preference*)
 - b. S thinks A can bring it about that the door is closed (*presumed control*)
 - c. S thinks A wouldn't necessarily close the door if not for S's utterance (*epistemic uncertainty*)
 - d. S thinks that (if nothing unforeseen interferes), in response to S's utterance, A will try to bring it about that the door gets closed (*decisiveness*)

More generally, the characteristics listed in (2a) to (2d) ensure that the move falls squarely into Searle's class of *directive speech acts*: speech acts by which the speaker intends that the addressee act in a particular way. Imperatives are thus also often characterized as *directives*.

However, it is far from clear how the imperative form type can be associated with this directive default function as used in its identification. In fact, theories of imperatives differ widely in which of the characteristics in (2a)-(2d) they take to be conventionally encoded (semantics) and how others can be derived pragmatically. The main reason to not build all aspects of an order into the semantics of the imperative clause type lies in the observation that imperatives can be used for conversational functions other than orders and requests as well. In fact, for each of the aspects listed in (2), we can find an example of a sentence in a context where that aspect is lacking even though the sentence unmistakably belongs to the form type imperative. In particular, this also means that not all imperatives are used for directive speech acts.³

³ Searle (1976) himself aims to understand *directive* broadly enough to encompass all uses in (3) except for (3g): "The illocutionary point of these consists in the fact that they are attempts (of varying degree, and hence, more precisely they are determinates of the determinable which includes attempting) by the speaker to get the hearer to do something. They may be very modest 'attempts' as when I invite you to do it or suggest that you do it, or they may be fierce attempts as when I insist that you do it. [. . .] Verbs denoting members of this class are ask, [. . .] order, command, request, beg, plead, pray, entreat, and also invite, permit, and advise. [. . .]", Searle (1976), p. 11. To the best of my knowledge, an operational definition of this particular class has not been provided in the philosophical literature. For instance, the axiomatic system in Searle and Vanderveken (1985) classifies neutral advice (exemplified for imperatives in (3d)) as assertoric. Focusing on the conversational function of imperatives rather than a general classification of speech acts, Keshet and Medeiros

Natural examples of speech acts performed with imperatives range from orders, requests, warnings, emphatic suggestions, advice, invitations, concessions, to expressions of acquiescence, and wishes (Schmerling 1982; Davies 1986, a.o.). Examples relying on suggestive choices of lexical and grammatical material are provided in (3). Schwager (2006b)/Kaufmann (2012) refers to this flexibility as *functional inhomogeneity*.

- | | | |
|--------|---|-----------------------|
| (3) a. | <i>Close the door, please.</i> | Request |
| b. | <i>Don't go near that door! (It may come unhinged, and you might get hurt.)</i> | Warning |
| c. | <i>Have another cookie!</i> | Invitation |
| d. | <i>A: How do I get to Harlem? – B: Take the A-train.</i> | (Disinterested)Advice |
| e. | <i>Ok, then go to the damn party!</i> | Concession |
| f. | <i>A: I am cold, can I close the window? – B: Sure, close it.</i> | Acquiescence |
| g. | <i>Please don't have broken another vase (now)!</i> | Wish |

Yet, despite this flexibility, imperatives cannot be used to describe the world as being such that its preajcent will come about in it or is (among the) optimal course(s) of events. In short, imperatives cannot be used for assertions.⁴

The range of uses exemplified in (3) proves stable across languages (and can be replicated in languages that mark the imperative form type more distinctly than English does, consider e.g. German, Japanese, Korean, or Bulgarian, cf. Kaufmann 2012). This suggests that it rests on an illocutionarily underspecified common semantic core which imperative clauses are associated with. It is far from clear, however, what this common semantic core should consist in: none of the aspects in (2) are present in all uses listed in (3).⁵ It may seem tempting to resolve the problem of functional inhomogeneity by treating at least some of these cases as indirect speech acts, i.e. “cases in which one illocutionary act is performed indirectly by way of performing another” (Searle 1975:60).⁶ Kaufmann (2019) argues against such an

(2019) consider a notion of directive as guiding the resolution of decision problems, which could maybe be turned into a definition of the intended class (I am indebted to an anonymous reviewer for pointing this out).

⁴ In Searle's (1976) terminology, they cannot be used for representatives, which he characterizes as having words-to-world direction of fit in contrast to directives with world-to-words direction of fit.

⁵ Speaker preference is lacking in at least (3d) and (3e), while presumed control, epistemic uncertainty and decisiveness are lacking in (3g).

⁶ Charlow (2011) explicitly suggests an account along these lines. He appears to have in mind a more technical notion than Searle's, treating indirectness as the stripping from the dynamic con-

approach. Imperative utterances serving non-canonical functions resist reports that render the indirectness explicit (examples from Kaufmann 2021, building on arguments from Heim 1977):

- (4) a. *(To go to Harlem) Take the A-train.*
 b. as a report of (4a): *#She advised him to take the A-train by ordering him to do so.*
- (5) a. *Please be in that room!*
 b. as a report of (5a): *#She expressed a wish for him to be in that room by ordering him (in absentia) to be there.*

In contrast, such reports are felicitous for cases like (6) (from Kaufmann 2021), showing that imperatives, like any other clause types, can be used as indirect speech acts in principle:⁷

- (6) 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.*

Overall, it seems that the meaning conventionally associated with imperatives should allow them to occur in a variety of non-assertoric speech acts (directly), not all of which are directives.

2.2 Imperatives and semantic theorizing

In section 2.1, we have established that imperatives cannot be associated with specific conversational functions directly. Finding a suitable illocutionarily under-

ventional meaning parts that are in conflict with the utterance context. The idea is not fully worked out, though, and Charlow's more recent works resort to an alternative framework relying on plan sets (Charlow 2014, see also section 2.3).

⁷ Note that some of the speech acts performed with imperatives indirectly could be classified as assertions, compare (i) from Lycan (1984):

- (i) a. *Believe me when I say that I don't like broccoli.*
 b. *Don't say that you didn't see this.*

For an analysis of indirect speech acts in *Segmented Discourse Representation Theory* (SDRT), see Asher and Lascarides (2001).

specified value is, however, far from straightforward, and standard techniques of semantic theorizing face a series of obstacles.

The field of formal semantics has been driven by the investigation of declarative sentences (Partee 2011, for a brief history of the field). In the tradition of Frege, Wittgenstein, Tarski, and Davidson, their meanings (*propositions*) have been associated with the truth-conditions native speakers intuitively assign to them (“To understand a proposition means to know what is the case if it is true”, Wittgenstein 1922, 4.024). Moreover, the semantic investigation especially of quantificational expressions and sentential connectives builds on entailment relations, which are traditionally studied as truth-preserving inferences. Imperative clauses, however, are not intuitively true or false, nor can they straightforwardly be associated with conditions under which they would be true or false. Attempts to state intuitively accessible truth-conditions as well as investigations of truth-preserving inferences are therefore bound to fail. Imperatives also resist a contextualist treatment, which approaches the meaning of expressions by considering the contributions they make to the meaning of larger expressions that contain them (Frege 1884). This is because the markers characteristic of matrix imperative clauses are limited with respect to what embedded clauses they can appear in. In fact, for a long time, they have been considered banned from embedded positions in general (e.g., Sadock & Zwicky 1985; Palmer 1986; Han 2000). This view is mainly considered obsolete (see section 5.1), and embedded occurrences have indeed come to inform the semantic (and syntactic) treatment of imperatives across languages. However, the traditional view does have a point in that the embedding of imperatives is restricted, with reported speech complements constituting the crosslinguistically most widespread environment. Other complex expressions that contain the marking otherwise characteristic of imperative clauses impose their own challenges for a semantic analysis and offer only limited feedback on the correct semantics of imperatives.⁸

In an attempt to extend the successful treatment in terms of truth-conditions and truth-values from declaratives to imperatives, researchers have looked to alternative semantic values that could be used to state the analogues of truth-conditions. Such semantic values would then also allow us to study valid inferences as those that preserve them, just like inferences between declarative sentences preserve truth. For instance, in a footnote, Montague (1974) proposes *fulfillment conditions* as specifying the semantic value of imperatives, in analogy to *answerhood condi-*

⁸ Consider for instance conditional conjunctions, see section 5, or various language specific findings like imperative forms in narrative use in Russian (Daiber 2009, for discussion and references), or in purpose clauses in Korean (Kim and Sells 2018).

tions as specifying the semantic value of interrogatives. The idea could be spelled out along the following lines:

- (7) a. *You closed the door* is true iff the addressee closed the door.
 b. *Close the door* is fulfilled (or satisfied) iff the addressee has closed the door.
 c. *Will you close the door?* is answered iff it is common ground between speaker and addressee either that the addressee will close the door, or that the addressee will not close the door.

An alternative would be whether an imperative is in force, that is *commanded* by the relative authority. Fox (2012) points out that intuitions about imperative inferences are far from stable and depend on the semantic values the interpreter has in mind. For instance, conjunction elimination as exemplified in (8) seems valid as preserving the value ‘Satisfied’, but not necessarily as preserving ‘Commanded’.

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

Fox (2012) concludes that imperatives should be associated with a family of semantic values, each of which is associated with a different set of valid inferences.

Another attempt to understand the differences between the various clause types replaces the traditional speech-act invariant truth-conditions with ones that include information about the speech act they might be used for. The classical source of such an account is the *performative hypothesis*, which in its syntactic incarnation is associated with Ross (1970) and Katz and Postal (1964), while the semantic version traces back to Lewis (1970). Imperatives are associated either syntactically with a full performative description as in (9b) or receive an interpretation that encodes this information.

- (9) a. *Open the door!*
 b. *I order you to open the door.*

The original explicit performative hypothesis has been criticized extensively (e.g., Cohen 1964; Gazdar 1979; Lycan and Boër 1980; Grewendorf 2002), most of all for assigning the wrong truth-conditions to declaratives (after all, their truth depends on the facts in the world, not on whether or not a speaker asserts them). Another issue consists in their too specific association with one particular illocutionary force (see also section 2.1).

More recently, in the vein of especially Speas and Tenny (2003), works on clause types but also various other linguistic phenomena sensitive to perspective

or attitude states of agents argue that at least some of the ingredients encoded in the performative hypothesis need to be represented syntactically (see section 5 for more discussion).

2.3 Current accounts for the semantics of imperatives

Recent semantic accounts of imperative clauses aim to find an illocutionarily underspecified semantic core that can serve to account both for the canonical function of ordering and for the wide variety of speech acts possible under specific contextual constellations and with specific lexical and functional material. At the same time, these accounts strive to ensure that imperatives cannot be used assertively.

Accounts along these lines first need to develop a model of how utterances with illocutionarily underspecified semantic content come to be associated with conversational functions. The crucial idea for relating propositions (understood as characterizing sets of possible worlds, or equivalently conditions for truth at a world) with assertions is spelled out in Stalnaker (1978): the essential effect of asserting a declarative sentence is to add the proposition it expresses to the *common ground*, the set of propositions that constitute mutual joint belief, thereby reducing the set of possible worlds that are compatible with the information shared by the interlocutors to those that also verify this sentence. For imperatives, we thus need to determine what semantic object they express, and possibly enrich the contextual representation beyond the set of propositions representing the information shared in the discourse. To the extent that we can match the classificatory properties of classical speech act theory to the resulting changes in the assumed discourse representations, we have obtained an account for the link between the semantic objects expressed and the illocutionary forces we take them to be associated with.

Owing to the challenges mentioned in section 2.1, the existing proposals differ significantly in what aspects associated with order-imperatives (as listed in (2)) are encoded in their conventional meaning, and how the specific conversational functions are derived from the interplay between meaning and contextual settings. In the words of von Stechow and Iatridou (2017), “proposals about the meaning of imperatives are package deals of a denotational semantics and a dynamic pragmatics” (p. 290). They distinguish between *strong theories* which assume denotations that are inherently modal, and *minimal theories*, which assume denotations that are not inherently modal and thus put a larger burden on the model of the utterance context and how it changes over a course of the conversation.

Seurenberg (1989), Mastop (2005), and Barker (2012) propose minimal theories that capitalize on the intuition that imperatives are about actions chosen and controlled by the addressee. Imperatives are taken to denote *action terms*, associated

with inferential patterns that capture the distinctive behavior of imperatives. The main other type of minimal theory associates imperatives with *properties* (Hausser, 1980; Portner, 2005, 2007). Paul Portner, in collaboration with Miok Pak and Raffaella Zanuttini, embeds the assumption that imperatives denote properties into a general theory of clause types and their specific discourse effects. He enriches the discourse model to contain storage sites for objects of three different logical types: the familiar *common ground* storing propositions (as denoted by declaratives, Stalnaker 1978); a *question set* storing sets of propositions (as denoted by interrogatives); a function associating each participant with a set of properties (as denoted by imperatives), constituting the participant's *To-Do list*. Utterances of main clause objects are associated with type-sensitive use conditions and thereby serve to update the relevant storage site. An additional principle, the *agent's commitment*, ensures that the To-Do list of an agent has a specific status in the conversation: it stores the set of properties for which the participants have agreed that the agent will strive to attain in order to be considered rational (Portner 2005, 2007).

The classical performative hypothesis (as well as current spin-offs developed in the syntactic literature, Alcázar and Saltarelli 2014; Isac 2015) can be classified as a strong theory if the speech act related part is seen as corresponding to a modal meaning. Other strong theories proposed in semantics build on the idea that imperatives express a certain type of *preferences* (bouletic modality), typically the ones of the speaker (Bierwisch 1980; Condoravdi and Lauer 2012; Oikonomou 2016). A theory along these lines needs to ensure that imperatives cannot serve as descriptions of the speaker's preferential state (i.e., for assertions). The best worked out account along these lines, Condoravdi and Lauer (2012), proposes that imperatives are associated with the speaker's *effective preferences*, an ordered set of realistic (epistemically possible) preferences with a ranking that resolves all conflicts. The non-descriptive effect is derived by letting imperatives express a proposition that self-verifies in any sincere utterance: 'the speaker is publicly committed to having an effective preference for the prejacent'. In a dynamic setting, Starr (2020) works with what suggests itself to be more of an intersubjective preference structure: information states are not just sets of possible worlds but come with a preferential ordering that can be updated with imperatives, giving them an inherently non-descriptive effect. Yet other strong theories let imperatives express *prioritizing modality*⁹ more in general and focus on the similarity between imperatives and modalized declaratives. Sentences as in (10a) can be used for assertions that describe the relevant obligations, but they can also be used to give orders and thereby change the addressee's obligations similarly to (10b) (Kamp 1973; Lewis 1979).

⁹ Portner's (2007) cover term for deontic, teleological, or bouletic modal flavors.

- (10) a. *You { have to, should } close the door.*
 b. *Close the door!*

Building on the assumption that the same propositions as expressed by the modalized declaratives (10a) can achieve these different functions depending on the respective contextual settings (e.g. Kamp 1978; Lewis 1979), the modal operator theory as developed in Schwager (2006b)/Kaufmann (2012) argues that imperatives contain a covert necessity modal similar to *have to* or *should*. However, in addition to the at-issue interpretation as a necessity modal, it also carries a presuppositional meaning component that constrains felicitous use to contexts in which a regular modal would end up being used performatively. Encoding intuitions from (2), Kaufmann (2012) assumes specifically that the use of an imperative commits the speaker to the assumptions that in the current context (i) they count as perfectly knowledgeable on the modal matter under discussion (*Epistemic Authority*); (ii) absent their imperative utterance, the prejacent might or might not have been brought about (*Epistemic Uncertainty*); and (iii) that the context is *practical*, or if not, *expressive*. In *practical contexts*, the imperative answers a decision problem for the addressee consisting of a series of salient choosable future courses of events (minimally, the imperative prejacent vs. its negation; see also Davis 2009) and the speaker commits to the assumption that the modal flavor associated with the imperative (the speaker's rules, the addressee's goals, . . .) is accepted as yielding the relevant criteria to solve the decision problem (*Ordering Source Restriction*; more recent works, *decisive modality*). If no decision problem can be construed as being addressed by the prejacent, the speaker is committed to the context being *expressive*, which means that the imperative expresses necessity according to the speaker's preferences.

Yet other accounts rely on combinations of (some of) these ideas to provide a semantic analysis of imperatives. To list just a few ideas, imperatives have been treated as quantifiers over possible worlds (i.e., sets of propositions that would characterize what is true in all worlds in which the imperative has been carried out; Han 1999), future contingencies (Eckardt 2011), properties of plan sets (Charlow 2014), or modal properties in an enriched model of the discourse settings (Roberts, 2015). Harris (2020) argues that, in general, the aim of establishing mutual joint belief should not be granted the constitutive role it has in much of current linguistic theorizing. He proposes an alternative intentionalist theory of imperative clauses. Concretely, he analyzes them as expressing the speaker's intention that the addressee form an intention to carry out the prejacent (Harris 2022).

Considering the range of possible speech act types as associated with imperatives (section 2.1), it is easy to see that all accounts struggle with at least one of the functions and may require specific assumptions to cover problematic cases. For instance, Condoravdi and Lauer's (2012) account in terms of (public) effective

speaker preferences is challenged by disinterested advice: they propose to treat it as a case of *cooperation by default* in which the disinterested speaker treats the addressee's goal as an effective preference of their own (provided it is not in conflict with any of their actual ones). Accounts that focus on the addressee's choice of action have trouble accounting for wishes like (3g): at utterance time, the state of affairs referenced in the imperative is already settled. Therefore, placing it on the addressee's To-Do list is not predicted to have any impact, making it a challenge also for Portner's property-based account. Relatedly, Kaufmann's account has to resort to an elsewhere condition for imperatives that cannot be construed as solving a decision problem.

2.4 Illocutionary strength, modal force, and free choice items

Strong and minimal theories alike are challenged by what von Stechow and Iatridou (2017) discuss as a distinction between *strong imperatives* and *weak imperatives*. When looking at imperatives in practical contexts, we find a difference in illocutionary strength (in the sense of Searle and Vanderveken 1985): imperatives are used as orders to bring about the state of affairs specified by the prejacent, but they also serve as invitations or encouragements to do so, or to express the speaker's acquiescence with a particular course of events (see section 2.1). From the point of view of a modal analysis, the difference comes down to a difference in quantificational force, as weak imperatives are paraphrased more naturally with possibility modals like *can*, rather than necessity modals like *should* or *have to*. Schwager (2006b)/Kaufmann (2012) therefore coins *quantificational inhomogeneity* for this particular aspect of functional inhomogeneity. The strong and minimal accounts detailed above all struggle with weak imperatives.

In some languages, overt markers serve to indicate various kinds of weak imperatives, consider *ruhig* in German in (11) (Schwager 2010; Grosz 2009), or *nyugodtan* in Hungarian from Szabolcsi (2021), who contrasts it with *rögtön* 'right away' as an adverbial that marks strong imperatives, see (12).

- (11) *Setz dich ruhig hin!*
 sit.IMP you RUHIG down
 'Feel free to sit down'

- (12) a. *Nyugodtan ülj le!*
 at.ease sit.SBJV.2SG down
 'Feel free to sit down' encouragement

- b. *Rögtön ülj le!*
 Right.away sit.SBJV.2SG down
 ‘Sit down right away’ command

Szabolcsi (2021) points out that strong and weak imperatives as marked by such adverbials (or the constructions in the English translations) differ in the ease with which the prejacent can be declined: “Thank you, I’m okay standing” is acceptable in response to (12a) or (11) but not (12b). Yet, even weak imperatives appear to convey the speaker’s expectation that the addressee will act on them if they don’t explicitly indicate the contrary.¹⁰ An effect along these lines distinguishes imperatives from genuine permission or possibility statements in conjunctions (from Kaufmann, 2021):¹¹

- (13) a. *You may leave through the backdoor, and you may leave through the front door.*
 b. *(Hereby) I allow you to leave through the backdoor, and, hereby, I allow you to leave through the front door.*
 c. *#(Ok,) leave through the backdoor; (and, ok,) leave through the front door.*

Kaufmann (2012) proposes a pragmatic solution for why a modal necessity statement can have the effect of a permission. Intuitively, this happens when the speaker can take it for granted that the addressee would want to carry out the prejacent if only they had the speaker’s permission. Committing to the proposition that the prejacent is optimal in light of the addressee’s wishes then amounts to either informing the addressee that the prejacent has been permissible all along (and they just didn’t know) or else that the speaker is rendering it permissible by that very utterance. Points of evaluation at which the prejacent is not permissible (and the speaker has

10 Note that this is obviously not true for *indifference sequences* like (ia), which are sometimes discussed as a form of weak imperatives. However, if we compare them to declarative clauses, it becomes obvious that indifference sequences of any clause type avoid the commitments speakers would incur with other uses of such clauses:

- (i) a. *Go left, go right, what do I care.*
 b. *She went left, she went right, what do I care.*

I take this to show that indifference sequences involve a more general (prosodically indicated) mechanism for suspending speaker commitment that is orthogonal to the conventional semantic meaning of imperative clauses.

11 Szabolcsi (2021) acknowledges this contrast and suggests modifying the modal operator account in favor of a quantificational force intermediate between possibility and necessity which remains to be specified.

thus committed to a false proposition) are incompatible with the presuppositions associated with the imperative operator; they thus have to be ruled out by the addressee if the common ground is to remain consistent. Kaufmann (2012) adduces the frequently surfacing modifier *if you like* as evidence for this strategy, and an analogous story might extend to Condoravdi and Lauer's account. A pragmatic solution along these lines is challenged by von Stechow and Iatridou (2017), who point out that in contrast to imperatives, necessity modals cannot be used to extend invitations or express acquiescence, emphasizing that this picture is crosslinguistically stable.¹²

At first glance, minimal theories seem tailor-made to handle the full spectrum of weak and strong imperatives. Their actual predictions, however, depend on the assumptions made about how the non-modal objects assigned to imperatives relate to conversational functions. For instance, thanks to the specific use condition of updating a To-Do List, Portner's (2005, 2007) minimal theory also faces a problem with weak imperatives. Portner (2010) derives permission-like imperatives from conflicting instructions on the To-Do list, which leaves the choice of which to realize to the addressee. He acknowledges, however, that sequences of conflicting imperatives do not offer choice between their two prejacent but are perceived as inconsistent. He hypothesizes a covert analog of *ruhig* (compare German (11)) in permission-like imperatives to enforce a choice-inducing update.

Working with a modal operator theory, Grosz (2009) proposes that imperatives are ambiguous between a structure with a possibility and a structure with a necessity operator. Building on German data, he argues that discourse particles can serve to disambiguate. Alternatively, several works propose that imperatives contain a possibility modal operator that is strengthened to express necessity by exhaustification. The effect is illustrated in (14b) vs. (14c):

- (14) a. *Close the door!*
 b. Closing the door is compatible with the rules/your goals/. . . (\approx it is possible that you close the door)
 c. Closing the door is the only relevant course of events that is compatible with the rules/your goals/. . . (\approx it is necessary that you close the door)

¹² While *must* indeed clearly fails to serve such conversational functions, the differences between *should*, imperatives, and *can* seem less clear-cut: while *You must have another cookie* and *You must open the window* make intuitively different contributions than the corresponding imperatives in (3c) and (3f) (but see discussion in Silk 2022), it is less obvious that *You should have a cookie!* cannot be used for invitations (similarly to the imperative). This suggests that the different modal expressions (for strong theories, this includes imperatives) each contribute subtle and still ill-understood restrictions on what speech acts they can be used for.

Theories along these lines differ in (i) how the exhaustification is encoded, (ii) what the relevant alternatives are, and (iii) what determines whether exhaustification takes place (that is, whether or not we obtain a strong or a weak imperative). For instance, several authors take exhaustification to result from a syntactically realized exhaustification operator. Schwager (2010) (also Kaufmann 2012) argues that an exhaustifier is present whenever it is not blocked overtly by operators like *for example*; the effect is not coarsened to salient alternatives. In contrast, Francis (2019) takes an exhaustification operator to appear optionally. Oikonomou (2016) argues that the difference between strong and weak imperatives results from a regular process of exhaustifying over focus alternatives. Specifically, the possibility semantics gives rise to strong imperatives by exhaustification over focus alternatives. With broad focus on the prejacent, the relevant focus alternative to the prejacent is its negation. Conjoining the at-issue meaning of the imperative with the negation of its (excludable) focus alternative expresses that the prejacent is necessary.

(15) *Close the door.*

- a. At-issue meaning: ‘It is possible that you close the door.’
- b. Focus alternative: ‘It is possible that you don’t close the door.’

In weak imperatives, however, the focus is taken to fall on the modal operator itself, resulting in a focus alternative that is the negation of the at-issue meaning. Negating it does not add an implicature and we obtain a possibility reading. Oikonomou (2016) provides experimental evidence that, in Greek, strong vs. weak imperatives are distinguished prosodically: strong imperatives display broad focus on the prejacent a nuclear pitch accent on the imperativized verb followed by deaccenting.¹³

Various authors consider focus particles like *even* and *only* promising sources for insights on how to best treat the difference between weak and strong imperatives. Haida and Repp (2012) observe that quantificational inhomogeneity effects persist in imperatives with *only* (their (3) and (4)):

¹³ Oikonomou (2022) adopts the same focus-based mechanism to toggle between weak and strong imperatives, but interprets imperatives as mood-marked propositions rather than quantification over worlds. Specifically, imperatives are taken to express partial functions from worlds to truth-values that are defined only at worlds compatible with the speaker’s desires at the world and time of the context. Quantificational force results from existential closure (yielding possibility as expressed by weak imperatives or necessity when subject to exhaustification in strong imperatives), or from quantificational adverbials like Greek *oposdipote* (‘definitely’) or *kalitera* (‘better’).

- (16) A: *Oh, I feel like doing something really useful today. I think I'll paint the tables over there.*
 B: *Only paint the [round]_F table!* strong/necessity
- (17) A: *You've asked me to paint those tables but I'm really tired and don't feel like doing something really useful today.*
 B: *(OK.) Only paint the [round]_F table!* weak/possibility

Haida & Repp (2012) argue that the different readings are compatible with the modal operator theory (and a pragmatic account for permission effects, as spelled out in Schwager 2006b/Kaufmann 2012) together with a regular entry for *only*, but also with a version of the To-Do list account if *only* is interpreted at the level of discourse effects (“update To-Do list only with”). Oikonomou (2016) argues that the different readings are better captured in terms of a scopal interaction with a modal operator in the logical form of the sentence. Specifically, she shows that fronting quantificational phrases forces surface scope with respect to modals in Greek, and she then proceeds to show that imperatives behave like possibility modals (after her (23a,b)):

- (18) a. *Vapse [Mono to strogilo trapezi].*
 paint.IMP only the round table.
 ok: ‘It is permissible that you paint the round table and not the other tables.’
 ok: ‘Only for the round table (and not for the other tables) it is permissible that you paint it.’
- b. *[mono to strogilo trapezi] vapse.*
 only the round table paint.IMP
 #: ‘It is permissible that you paint the round table and not the other tables.’
 ok: ‘Only for the round table (and not for the other tables) is it permissible that you paint it.’

Francis (2019) shows that wide-scope occurrences of *even* are felicitous in weak, but not strong imperatives (her (4) vs. (5)):

- (19) Context: Prof. X is invigilating an exam and orders the students to stop writing.
Put down your pens. [Close your exam papers]_F (#even). strong/necessity
- (20) Context: Prof. Y is telling students who have been writing an exam that the test will no longer count toward their grades and they are free to do whatever they like.
Put down your pens. [Close your exam papers]_F (even). weak/possibility

On Francis's (2019) account, imperatives contain a possibility operator that can optionally be subject to exhaustification. Under the assumption that the covert exhaustification operator and the focus particle *even* operate on the same set of alternatives to the prejacent, the additive presupposition associated with *even* clashes with exhaustified possibility. No such conflict is predicted for statements formed with a lexical item *have to* that expresses necessity without relying on exhaustification (compare 'some other alternative is also necessary' to #'some other alternative is also the only possibility'). And indeed, (21a) is felicitous in place of the imperative version in (19), just like (20) could be replaced by (21b).

- (21) a. *You have to put down your pens. You even have to [close your exam papers]_F.* necessity
 b. *You can put down your pens. You are even allowed to [close your exam papers]_F.* possibility

Free choice items are also discussed as providing evidence in favor of a possibility operator. Like possibility modals and unlike necessity modals, imperatives license (universal) free choice items like English *any*:

- (22) a. *You { can , may } pick any flower.*
 b. *#You { must , should } pick any flower.*
 c. *Pick any flower.*

Accounts differ in what specific mechanism explains the contrast between (22a) and (22b) (see Aloni 2007; Dayal 2013; Chierchia 2013 and references therein). Yet, independently of the account chosen the data in (22) appear to support a genuine possibility semantics of imperatives (at least at some step in the composition).

Upon closer inspection, however, the evidence from the free choice data proves more intricate. In line with the observation above that weak imperatives are still stronger than the corresponding *may*-sentences (compare (13)), Aloni (2007) associates imperatives with a force that combines quantification over alternatives with modal quantification, requiring that at all permissible worlds one alternative is carried out (i.e., one flower is picked) but all flowers are picked at some permissible world (i.e., picking that particular flower is permissible). Sticking to a regular necessity operator,¹⁴ Kaufmann (2012) claims that (23a) is similar to (23b), where

¹⁴ While this necessity operator is underlyingly derived from exhaustification of a possibility operator, this happens locally, that is, before the modal operator combines with the prejacent.

the relative clause licenses a free choice item under a necessity modal (*subtriggering*, Dayal 2003).

- (23) a. *Pick any flower (you like).*
 b. *You { should, ^(#)have to } pick any flower *(you like).*

Kaufmann's account fails to explain why the relative clause modifier is optional in imperatives. Moreover, Francis (2020) points out that it predicts wrongly that, just like (23b), it should amount to a requirement for the addressee to pick all the flowers they like ('for every flower you like, you should pick that flower'). While such a reading exists, (23a) also has a salient reading that considers only courses of events in which singular flowers are liked and thus chosen for picking (roughly, 'you have to pick whichever flower it is you like').¹⁵ Francis (2020) argues that both weak and strong imperatives license free choice items. For her, independently of whether a covert exhaustifier is realized (thus generating a strong imperative), the felicity of the free choice item is calculated before exhaustification takes place. Consequently, all imperatives behave like possibility modals for the purpose of licensing of free choice items. On this account (as on Aloni's), free choice items are predicted to be felicitous also in commands. This, however, seems problematic. Szabolcsi (2021) adduces the contrast in (24) (her (65)) to argue specifically that "FCIs happily occur in imperatives, as long as they are not commands" (p. 21).

- (24) a. *#Pick any of the apples right away.* command, #FCI
 b. *Feel free to pick any of the apples.* encouragement, ✓FCI

Aloni (2007) or Francis (2020) predict both to be acceptable (after all, 'pick an apple right away, any apple will do' is perfectly felicitous). Francis's (2020) example of a 'strong imperative' in (her (9a,b)) appears to be a piece of advice or an instruction:

- (25) A: *How do I get into your book club?*
 B: *Read any book!*

¹⁵ These observations are reminiscent of the considerations regarding plain "permission" reading for imperatives, see footnote 12 above. Again, (23b) with the weak necessity modal *should* appears to have a "choice-offering reading" similar to (23a), in addition to a regular universally quantified reading on which it is necessary that all the desired flowers get picked. The universally quantified reading is the only one available for *have to* (where the FC item with the restrictor *you like* it is perceived to be pragmatically odd by most of the speakers I consulted).

In prose, Francis's (2020) analysis amounts to 'it is necessary that you read no less than one of the books in the domain, but for each of the books you can read that book'. If this is indeed the reading native speakers assign to (25), the sentence should be felicitous in response to a request like *Tell me something that I have to do to get into your book club*. The native speakers I consulted hesitate, which suggests that (25) might be analyzed better as a weaker conversational move, probably along the lines of 'I'd suggest that you read a book, any book will do' (meaning that reading a book is not the only option that would get you into the book club and is therefore not a necessity; e.g., paying a fee would work, too).

To conclude, the recent literature shows convincingly that the interaction with free choice items and focus particles holds important insights for understanding the semantics of imperative clauses. However, more subtle distinctions between not only the perceived modal force but also the modal flavors and overall discourse effects are called for to fully elucidate the connections.

3 How imperative meaning is encoded

While semantic theories strive to associate imperatives with conventional meaning that can account for both the prototypical association with directive illocutionary force and the variety of other speech acts imperatives can perform, syntactic theories aim to account for the characteristics that single out the imperative form type. Following general ideas of generative semantics, the performative hypothesis (Ross 1970; Sadock 1969) can be seen as an early attempt to provide answers to both, but it failed to hold up to various problems not only from the semantic, but also from the syntactic perspective. Much of the earlier syntactic literature focuses on the particularities of English imperatives, which include not only an uninflected verb, but also seemingly free alternation between overt and covert subjects as well as *do-support* in negative and emphatic clauses; compare (26):

- (26) a. (*{ Nobody, YOU }*) *move!*
 b. *Don't have hit your head!* (parent upon hearing a crash in the back room)
 from van der Wurff (2007a), his (35)
 c. *Do be here when the band begins to play!*

The observation that imperatives can be tagged with *will* has given rise to the idea that the clause type could result from deletion of the auxiliary *will* and a subject pronoun *you* (Chomsky 1955). However, imperatives can also be tagged with *would*, *can* and

could (Bolinger 1967), and negative tag-questions do not change an imperative's polarity (see discussion in van der Wurff 2007a; (27a) shows his (21a,b)):

- (27) a. *Give me that plate, { will you, won't you }?*
 b. *Give me that plate, { could, would, can } you?*

Like the *will*-deletion account, some early ideas on imperatives are also specific to English with its notorious conflation of almost all finite verb forms and the infinitive. But the recognition of imperatives as one of three universally marked clause types (Sadock and Zwicky 1985) has sparked an interest in possible universals of imperative marking. Building on the clausal structures standardly adopted in the generative framework of the 1980s and 1990s, one of the main questions thus becomes to what extent imperatives have the same structure as other clause types (van der Wurff 2007a). Many authors defend the idea that imperatives are CPs (e.g. Rooryck 1992; Rivero 1994a,b; Rivero and Terzi 1995; Zanuttini 1997; and Rosengren 1997; Han 1999, 2000). This fits well with the idea that the individual clause types are distinguished by material in a designated position high in the clause. Typically, authors assume an IMP feature located in the head C, or, in Rizzi's 1997 Split CP-system, in the appropriately named head of ForceP. Parameterization of the IMP-feature as strong or weak¹⁶ can then be used to explain for instance why in all Germanic languages other than English, imperative clauses are verb-initial, compare English (28a) and German (28b):

- (28) a. *Nobody move.*
 b. *Geh da mal keiner hinein!*
 go.IMP there QPART nobody in
 'Don't anybody go in there!'

Observations about negation and clitics provide further arguments for overt vs. covert movement of the imperativized verb, or optionality in this respect, as proposed for instance for Serbo-Croatian (29) (from Isac 2015). Data like (29) have also been considered as evidence that imperativized verbs do not universally move to C (Rupp, 2003) and behave like finite verbs in other matrix clauses (Wratil 2005).

¹⁶ In the sense of whether it triggers overt movement; this syntactic notion is orthogonal to the semantic-pragmatic distinction of weak and strong imperatives discussed in section 2.4.

- (29) a. *Čitajte je!*
 read.IMP.2PL it.CL
 ‘Read it!’ Rivero and Terzi (1995), their 12
- b. *Knjige im čitajte!*
 books to.them.CL read.IMP.2Pl
 ‘Read books to them!’

If clauses contain a peripheral CP-domain hosting structural elements that encode issues pertaining to speech acts and information structure, it seems natural that these projections would be realized in imperatives. However, many authors aim to explain particularities of imperatives by assuming that a particular part of the clausal spine is deficient or missing, specifically TP (Beukema and Coopmans 1989; Zanuttini 1991; Platzack and Rosengren 1997; Rupp 1999; Han 1999, 2000; Zeijlstra 2004; Den Dikken and Blasco 2007). In addition to peculiarities regarding word order, subjects, and negation, specifically the apparent lack of temporal contrasts has been used to motivate the idea. From a semantic point of view, however, this assumption is problematic, (e.g., Schwager 2006b; Jensen 2004, see section 4.2).

Parallel to the growing consensus in semantics that clause types do not determine specific illocutionary forces (*pace* Searle 1969), the more recent syntactic literature also aims to replace an inventory of clause-type specific features DECL, INT, IMP (realized alternately in a designated position of the left periphery), with a combination of elements that only jointly determine the relevant form type and the meaning associated with it. An early idea along these lines can be seen in Han (2000), who assumes an imperative operator in C but associates it with a feature bundle [*irrealis, directive*]. Cases of apparently regular morphosyntactic imperatives in clearly non-directive uses, specifically conditional conjunctions (see section 5.1), are treated as containing a deficient imperative operator lacking [*directive*]. Building on clause type particles in Korean (see Pak et al. 2007), Zanuttini (2008) treats imperatives as one member in a paradigm of *jussive clauses* that serve to commit the addressee (imperatives), the speaker (promissives), or speaker and addressee(s) together (exhortatives) ((30) is her (56)).

- (30) a. *Cemsim-ul mek-ela*
 lunch-ACC eat-IMP
 ‘Eat lunch!’ ‘Eat lunch!’
- b. *Cemsim-ul mek-ca*
 lunch-ACC eat-EXH
 ‘Let’s eat lunch together!’ exhortative

- c. *Nayil cemsim-ul sa-ma*
 tomorrow lunch-ACC buy-PRM
 ‘I will buy you lunch tomorrow.’ promissive

These three clause types are characterized by a special projection in the left periphery, the Jussive Phrase, whose head binds a variable in subject position and thus derives a property-denotation (see To-Do list account, section 2.3). This mechanism also provides an explanation for the particularities of imperative subject marking. The Jussive head transmits person features to the subject in clauses where TP is absent or lacks ϕ -features; depending on whether these are first, second, or first person plural inclusive, the result is a promissive, an imperative, or an exhortative, respectively. While offering a natural explanation for the Korean data, the framework would lead us to expect similar paradigms to be more widespread crosslinguistically.¹⁷

Speas and Tenny (2003) aim to derive the clause type paradigm by letting matrix clauses project a verbal shell that represents information regarding the speech act. This parallels the Θ -grid associated with a lexical verb: the Speech Act Phrase hosts a representation for the speaker in its specifier, the addressee as a goal, and the utterance content as an argument. The Speech Act Phrase also dominates the Sentience Projection, with positions for a representation of the point of view (*Seat of Knowledge*) and of Evidence. While the specific implementation is problematic in its details (see Gärtner and Steinbach 2003; Isac 2015) and a compositional interpretation still stands to be developed, these ideas constitute an attempt to revive the Performative Hypothesis in a more robust incarnation.¹⁸ Alcázar and Saltarelli (2014) specifically develop the idea further for imperatives and call their account *Performative Hypothesis Light*. Isac (2015) argues that there is no convincing evidence for a syntactic representation of the speaker. She takes imperatives to contain a Speech Event Phrase that hosts a representation of the addressee as its specifier and a [*cause*]-feature as well as second person features on its head. The latter can be transmitted to the subject of the imperative clause. At the level of the interpretation, the [*cause*]-feature is supposed to reflect the involvement of the speaker.¹⁹

¹⁷ A critical discussion of this particular subject marking process can be found in Isac (2015). Kaufmann (2019) and Gärtner (2021) offer semantic considerations for why promissives might be rare crosslinguistically.

¹⁸ Truckenbrodt (2006) proposes a similarly detailed representation which is supposed to derive various major and minor clause types in German (including imperatives) together with an interpretation. Extensive critical discussion can be found in the same journal issue.

¹⁹ *Obviation effects* (i.e. restrictions against specific subject values, notably the speaker in non-interrogative matrix clauses) confirm that a parameter associated with the speaker in canonical

- (31) a. *Brush your teeth!*
 b. The speaker causes it that the addressee brings it about that his/her teeth are brushed by uttering (a).
 (Isac 2015:228)

Imperative marking appearing in combination with interrogative marking or prosody provides important feedback for our overall understanding of clause types. For instance, Schwager (2006b)/Kaufmann (2012) notes the possibility of rhetorical questions in Colloquial German (standardly assumed to have genuine interrogative syntax), cf. (32). Stegovec (2017) discusses imperatives in Slovenian *scope marking questions*, cf. (33), interpreted roughly like extraction out of a speech report (Dayal 1994). Schwager (2006b), Portner (2018a), Rudin (2018), and Kaufmann (2019) discuss imperatives with rising intonation, cf. (34):

- (32) *Na komm du weißt es doch. Wo stell den Blumentopf hin?*
 PART come.IMP you know it PART where put.IMP the flowerpot at
 ‘Come on, you know it. Where do you have to put the flower pot?’

- (33) *Kaj je rekla? Kaj kupi?*
 what AUX.3 said.F what buy.IMP.(2)
 ‘What did she say? What should you buy?’
 (Slovenian, Stegovec 2017:8a’)

- (34) (Not sure how to best solve this problem)
Ruf sie (vielleicht) mal an?
 call.IMP her (maybe) QPART up
 ‘Call her (maybe)?’

The joint appearance of markers that are normally taken to be constitutive of the imperative clause type and the interrogative clause type, respectively, provides strong support for the move away from designated, uniquely determining clause-type features.²⁰

main clause imperatives is semantically active (Quer 2006; Kempchinsky 2009; Stegovec 2019; Kaufmann 2019, and section 5.1). Specifically, the relevant “speaker parameter” seems sensitive to embedding (it shifts to the referent of the matrix subject in speech reports; see Sect. 5.1) and interrogative formation (where it shifts to the addressee). Whether this parameter is syntactically represented constrains our choices of how to analyze the shifts.

²⁰ The unavailability of truly information seeking questions with imperatives outside of scope marking then requires a separate explanation. Building on evidence from surrogate imperatives

The more recent approaches to the syntax of imperatives (and clause types in general) relate naturally to the compositional approach to clause type encoding as proposed in the more recent semantic literature. However, while the individual syntactic components are typically given semantically suggestive names, few of the syntactic accounts are paired with a theory of how these ingredients relate to semantic and pragmatic properties of the clause types.²¹ At the same time, Kaufmann (2012) adopts a fine-grained illocutionarily underspecified semantics. But while the proposed semantics involves enough ingredients to make it readily available for decomposition, it is read off a monolithic modal operator specific to imperatives (for semantically motivated decompositions, see Oikonomou 2016; Keshet and Medeiros 2019). Zanuttini's (2008) work (in co-operation with Paul Portner and Miok Pak) stands out by associating a detailed syntactic representation (involving a Jussive head with second person features) with a fully-worked out semantic theory (the To-Do list account, Portner 2005; Zanuttini et al. 2012).

In the remainder of this chapter, I will look in more detail at other grammatical categories in imperatives clauses that hold significant insight for both syntactic and semantic theorizing, before concluding with current issues concerning imperatives in embedded positions and closely related (minor) clause types. I will mostly focus on semantic aspects, but will highlight syntactic implications that are discussed in the literature or are obviously relevant.

4 Imperatives and other grammatical categories

4.1 Imperative subjects in canonical morphosyntactic imperatives and beyond

Syntactic and semantic theories alike face challenges with respect to the subjects of canonical morphosyntactic imperatives. First, covert subjects are possible even in languages that normally require subjects to be realized overtly (Aikhenvald

with non-second person subjects (see section 5.2), Stegovec (2017, 2019) and Kaufmann (2019) propose to explain it in terms of a syntactic or semantic violation that results from the identity between a second person imperative subject and a second person perspectival center in canonical interrogatives.

²¹ For instance, Isaac's interpretation in (31b) constitutes a description of prototypical imperative utterance events. It is, however, too specific to capture the full range of imperative speech events (see section 2.1), and more fundamentally, like the original performative hypothesis, it stops short of explaining why entities with this kind of meaning are used the way they are.

2010).²² Semantically, however, covert and overt referential subjects are interpreted as referring to (one of) the addressee(s). Covert subjects can be replaced by overt second person pronouns (especially when indicating emphasis); other person values are unacceptable:

(35) *Geh* ({ *du*, **er*, **ich* }) *hinein*.
 go.IMP you, he, I in
 ‘(You) go in!’ German

(36) {*Omae ga*, **kare ga*} *ugok-e*
 you NOM, he NOM move-IMP
 ‘YOU move.’/ int. ‘HE move’
 (Japanese, Kaufmann and Tamura 2020:52a)

Covert imperative subjects bind second person reflexives and can control PRO:

(37) a. *Wash* {*yourself*, **you*, **myself*, **herself*}!
 b. *Try to PRO wash* {*yourself*, **myself*, **herself*}!

Quantificational subjects have been shown to be acceptable in typologically unrelated languages.²³ While formally third person (at least in non-imperative contexts), they seem constrained to be interpreted as quantifying over a plural addressee (Schmerling 1982). At least in English, they can bind either second or third person pronouns as shown in (38):²⁴

²² Platzack (2007) (p. 193) discusses Icelandic as a possible exception.

²³ To the best of my knowledge, no language has so far been claimed to disallow quantificational subjects in imperatives.

²⁴ This differs from quantifiers in declarative clauses. However, Zanuttini et al. (2012) (fn. 9) observe exceptions like the following:

(i) (Context: message posted on *My Space*) *Has everyone on here (My Space) received your class of 1997 reunion invitation?*

They maintain that “in declaratives and interrogatives, examples of this type require a special context, whereas in imperatives they do not. This difference must be explained.” (p. 1239) However, as an alternative to letting the Jussive head transmit second person features to pronouns bound by a subject quantifier in imperatives (an account that is designed to not extend to declaratives or interrogatives), one might argue that contexts in which quantificational imperatives occur felicitously share relevant properties with those that permit quantifiers to bind second person pronouns in other clause types (cf. (i)). Potentially relevant in this regard is Kaur’s (2020) work on Punjabi, for which she argues that the addressee-relatedness of imperative subjects is a form of allocutive marking and thus not mediated by an imperative specific projection.

- (38) *Everyone_i raise {his_i, your_j} hand*
- (39) *Geh da mal keiner hinein*
 Go.IMP there QPART nobody in
 ‘Nobody (of you) go in.’²⁵
- (40) *{Dare ka , Minna ga} ugok-e*
 somebody everybody move-IMP
 ‘Somebody/everybody (of you) move!
 (Japanese, Kaufmann and Tamura 2020:52a)

The alternation between overt and covert subjects as well as the presumed restriction to the second person have generally been considered evidence that the licensing of the imperative subject follows a special mechanism. Zanuttini (2008) and Zanuttini et al. (2012) argue that person features can be transmitted to the subject or the domain of a quantificational subject from the Jussive head that is characteristic of jussive clauses; imperatives result when the Jussive head hosts second person features (see section 3). Kaufmann (2012) proposes that imperatives are associated with a specific person feature that requires the subject to be interpreted as a quantifier over the set of addressees. While amounting to the same semantic constraint on what are acceptable subjects, the two accounts differ in their predictions for the semantics-pragmatics interface. Charlow (2018) discusses potential problems for both accounts’ effects on their presumed discourse representations (To-Do lists/decision problems) and proposes an alternative in which the universal quantifier takes scope over the imperative-specific denotation (in his case, forming the union of properties of plans as relativized to each of the addressees). Letting the quantifier take scope over the imperative specific semantic object works for positive universal quantifiers like *everyone/everybody*. However, an extension to *nobody* or *somebody* remains to be developed.²⁶ All existing accounts fail to explain that the inventory of quantifiers (even with a second person domain) acceptable in imperatives is limited (Craig Roberts, p.c.):

- (41) *{#Few / #most } of you move!*

²⁵ Quantificational subjects in German imperatives require the presence of a temporal quantificational particle *mal*, whose occurrence remains to be explained (Kaufmann 2012, crediting Anita Mittwoch, p.c.).

²⁶ The negative universal could be treated in terms of decomposition into a universal like *everybody* and a negation that stays below the mood specific operator. The positive indefinite *somebody* strikes me as more problematic.

Setting aside quantificational subjects, English allows at least also proper names, definite descriptions, free relatives, and bare nouns, as long as they refer to, or quantify over (elements of) subsets of the set of addressees. These types are ruled out in German. On Kaufmann's (2012) account this is captured because English imperative subjects (construed as quantifiers) can have a domain that is a proper subset of the set of addressees (possibly a singleton set), whereas it has to be the entire set of addressees in German. In contrast, Potsdam (1998), Zanuttini et al. (2012), and Isac (2015) conclude that the reference/domain of English imperative subjects is unconstrained: instead of being bound by the Jussive head or agreeing with the representation of the addressee in the left periphery, person features can also be supplied via T as in other clause types. Specifically, imperatives also seem to be acceptable in the absence of a specific addressee (as when (42a) is uttered on a deserted beach; Schmerling 1982; Potsdam 1998; Zanuttini 2008), or without a grammatical or semantic subject altogether (as in (42b)):

- (42) a. *Someone help me!*
 b. *(Please) don't rain!*

The native speakers I consulted reject imperatives used to address a specific (group of) individual(s) while indicating that the quantificational domain of the subject does not contain the individual(s) addressed (*pace* Potsdam 1998). A plural second person pronoun can generally be construed as including the referent of a vocative together with a group of individuals associated with them, allowing for a second person domain of quantification in (43a). However, overtly indicating that the quantificational domain excludes the referent of the vocative (the *mâitre'd* is not one of their own underlings) renders (43b) unacceptable for all speakers I consulted:

- (43) a. *Mâitre'd, someone seat the guests.*
 b. *#Mâitre'd, one of your underlings seat the guests.*

In order to reconcile these data, which are in line with Downing's (1969) and Schmerling's (1982) observations, we could consider adopting the following constraint on English imperative subjects:²⁷

- (44) When construed as a quantifier, if there is a non-empty set of addressees, the domain of the imperative subject contains at least one of them.

²⁷ This idea was presented at SALT 19, but the part on English imperative subjects was not included into the proceedings paper (Kaufmann, 2019).

However, the varieties of English described by Potsdam (1998) and Isac (2015) do not appear to display any restriction on the subject of the imperative. Zanuttini et al. (2012) compare such cases to languages in which second person marked imperative verb forms are part of a full paradigm containing also forms for other persons. Consider (45) from the Indo-Aryan language Bhojpuri as discussed in Zanuttini (2008):

- (45) *Tebulwa: sa:ph rahe!*
 table-NOM clean-NOM be-IMP.3SG
 ‘Let the table be clean!’
 (Bhojpuri, Zanuttini et al. 2012:6b)

Zanuttini et al. (2012) argue that even though the subject in (45) is third person (referring to a non-addressee), the person supposed to make sure the course of events is realized is the addressee. They assume that in such cases the Jussive head still carries second person features and hence creates a property whose domain is restricted to contain just the addressee. Yet, in cases like (45), the subject does not get bound by the Jussive head and does therefore not receive its second person features. Thanks to its restriction to a second person domain, the imperative serves to update the addressee’s To-Do list. Consequently, we obtain what they call a *third person imperative*, which is semantically interpreted as an incentive for the addressee to bring about the truth of the prejacent proposition (paraphrasable as ‘see to it that. . .’).²⁸ Interestingly, not all cases where canonical second person imperatives appear to form part of a full person paradigm follow this pattern semantically. For instance, for Slovenian, Stegovec (2019) argues that second person imperatives form a directive paradigm with subjunctives (formed with *naj* and the present indicative). In Slovenian, too, third person directives (translated as ‘he/she/it should really. . .’) often imply that the addressee should bring about the truth of the prejacent (‘see to it that he/she/it. . .’). However, Stegovec (2019) adduces the naturally occurring (46) to argue that this component cannot be encoded conventionally (his fn. 8, (iv)):²⁹

- (46) *Prvi dan je reku nej bo nebo in nej bo zemlja!*
 first day is said SBJV will.be.3 sky and SBJV will.be.3 earth
 ‘On the first day he said let there be sky and let there be earth!’

²⁸ *stit* (for ‘see to it that’) appears as an operator in deontic logics, see Belnap et al. (2001).

²⁹ The subjunctive particle *naj* appears as *nej* in an attempt to more closely approximate the colloquial pronunciation (Adrian Stegovec, p.c.).

Slovenian *naj*-subjunctives with third person subjects can thus not be analyzed as third person imperatives along the lines of what is proposed in Zanuttini et al. (2012) (see section 5.2 for further discussion). The modal operator analysis can account for such cases if it allows the decision problem to be relativized to the subject referent rather than the addressee (compare section 2.3 and Kaufmann 2019).³⁰

Things are even more complicated for imperative-like forms containing first person subjects, and the existing literature offers little systematic discussion. In principle, Zanuttini et al.'s (2012) analysis for imperatives without transmission of person features should extend to propositions with first person subjects. These would encode that the addressee should see to it that the speaker does something or experiences a certain state (*first person imperatives*). While this does not seem to be available in English, Isac (2015) finds a reading along these lines for Romanian subjunctives (formed with the particle *să*). In contrast, Zanuttini et al. (2012) consider a different (i.e., non-imperative) subtype of jussive clauses that results from first person plural features on the Jussive head, namely *exhortatives*. While the details remain to be worked out, the result would have to update a To-Do list associated with a group containing the speaker and the addressee. Alternatively, the modal operator analysis would consider these in terms of a decision problem for the plural agent including speaker and addressees. Either analysis could extend also to the English *Let's*-construction (Mastop 2005) or Japanese *(-y)oo* (Fujii 2006, Kaufmann and Tamura 2020).³¹ For English, Mastop (2005) shows that the contracted form can only be understood as having a first person subject, whereas the non-contracted version is a canonical second person imperative with a first person direct object:

- (47) a. *Let's take our clothes off!* exhortatives
 b. *Let us take our clothes off!*

³⁰ Note however, that (46) would have to be assimilated to expressive imperatives, unless it is taken to address a decision problem for an unnamed higher being or nature itself, a strategy one should then contemplate for expressive imperatives in general (see section 2.3).

³¹ The first person singular case is supposed to amount to a promissive that commits only the speaker.

(i) *(boku-wa) beeguru tabe-yoo.*
 I-TOP babel eat-EXH
 'I'll eat bagels.' (Fujii 2006:9a)

Interestingly, first person singular constructions along these lines are crosslinguistically rare (see also section 3). Note that neither Slovenian nor Romanian first person subjunctives allow for a reading along these lines.

The intricacies especially of English imperatives suggest that an experimental study might be called for to solidify the empirical generalizations. Comparably detailed investigations remain to be carried out for other languages with distinct marking of second person imperatives. Moreover, more research is required to distinguish between third person imperatives that conventionally encode an obligation for the addressee and imperative-like forms that serve to express the speaker's opinion that a third person should act in a certain way (see section 5.2).

4.2 Tense and aspect

Aspectual oppositions are increasingly seen as playing their usual role in imperatives. Progressive aspect in English, for instance, is acceptable as long as a salient reference time is overtly encoded or contextually salient.

- (48) a. *Wait for me at the gate!*
 b. *Be waiting at the gate (when your boss arrives).*

In contrast, Slavic languages appear to use imperfective aspect in imperatives even without any of the meaning components normally associated with imperfective (incomplete/on-going action or habituality), so-called *fake imperfective*. Building on an extensive corpus study, Alvestad (2013) confirms previous observations that the phenomenon is most pronounced in the East Slavic languages (Russian, Belarusian, Ukrainian), and relates it to a general property of imperfective aspect as encoding anaphoricity to an event described or to a salient event description. In negative imperatives, the perfective/imperfective opposition appears to be neutralized in Slavic languages more in general (see section 4.3).

Another grammatical opposition that has often been considered neutralized in the imperative clause type is tense, promoting also syntactic assumptions that TP as the functional projection hosting tense might be absent altogether from imperatives (Zanuttini 1991, Platzack and Rosengren 1997, Wratil 2004: see section 3). A lack of temporal information as encoded in the syntax poses problems, however, for the interpretation of adverbials (Kaufmann, 2012). Some languages have also been argued to morphologically encode the difference between imperatives selecting for actions to occur immediately vs. further in the future (e.g. Fox, Takelma: Aikhenvald 2010:129–133; Cheyenne: Murray 2016).

In English and German, imperatives with present perfect marking can describe settled states of affairs and can be used to express wishes about an addressee who is actually present or is merely imagined (Culicover and Jackendoff 1997). For German, Kaufmann (2012) argues that the present perfect morphology retains its

usual semantic flexibility and allows an interpretation as semantic past tense. Evidence for this comes from adverbials like *1990* ‘in (the year) 1990’.

- (49) a. *Please don't have broken another vase.*
 b. *Bitte hab 1990 nicht mehr in Tübingen gewohnt!*
 please have.IMP.2 1990 not anymore in Tübingen lived
 roughly: ‘I really hope that you weren't living in Tübingen anymore in 1990’ (else I've lost my bet)

An increasing number of languages (Spanish: Bosque 1980, Vincente 2013; Dutch: Mastop 2005; Brazilian Portuguese: Cavalcante and Pavia, this volume), are argued to mark form types that could be called *counterfactual imperatives*. That is, we observe clauses that are morphosyntactically and semantically related to, or even formally identical to (Japanese: Saito 2016; Catalan Sign Language: Karawani and Quer 2018), imperatives, but serve to call out a suboptimal choice of action the addressee has taken in the past (typically as a reproach):

- (50) a. *Kinoo paati ni ik-e yo!*
 yesterday party DAT go-IMP.2 SFP
 ‘You should have gone to the party yesterday!’ (lit. ‘Go to the party yesterday!’) (Japanese, Saito 2016)
 b. *Had je telefoonnummer dan ook niet aan di vent gegeven.*
 had your phone-number Prt Prt not to that guy given
 ‘You shouldn't have given your phone number to that guy.’
 (Dutch, Mastop 2005:14b)

More research is needed to better understand the use of imperatives (with or without additional past tense marking) to indicate counterfactuality of the optimal choice of action.³²

³² A compositional analysis is provided in Saito (2016). He notes moreover that the role of past tense marking in cases like (50) seems related to fake past in counterfactual conditionals and points out that Japanese is a language that need not overtly mark counterfactuality in conditionals either (e.g., Takubo 2020, Mizuno and Kaufmann 2018). More research is required to determine if this correlation holds crosslinguistically.

4.3 Imperatives and negation

Languages differ as to whether the morphosyntactic marking characteristic of positive imperatives can combine with the negative marker found in other clause types (Zanuttini 1991; Miestamo and van der Auwera 2007; Isac 2015). The syntactic idiosyncrasies arising with negation are sometimes seen as evidence for the existence of a separate clause type of prohibitives (van der Auwera 2005). From a semantic-pragmatic perspective, however, a move along these lines struggles with the fact that negative imperatives replicate the spectrum of speech act variation that we find with positive imperatives (compare functional inhomogeneity, section 2.1). When positive and negative predicate are equally well suited to describe a particular course of events, either one of them can serve to single it out as the optimal choice, see (51). Depending on context and intonation but independently of polarity, both (51a) and (51b) can serve as orders, requests, advice, implorations, suggestions, and more.

- (51) a. *Stay.*
 b. *Don't leave.*

Moreover, syntactic idiosyncrasies occur only in a subset of languages and correlate with syntactic properties of both imperatives and negation. Rivero and Terzi (1995) distinguish between two classes of true imperatives: *Class I imperatives*, which cannot be negated (e.g. Greek, Romanian, Spanish, Italian, Hungarian, Latin), and *Class II imperatives*, which can (e.g. Bosnian/Serbian/Croatian, Bulgarian, Russian, Polish, German), see (52). Class I languages express negative imperatives with suppletive forms (*surrogate imperatives*, see also section 5.2), typically subjunctives or infinitivals; (53c) exemplifies for Italian.³³

³³ Portuguese is usually considered a Class I language, consider (i) from Zeijlstra (2004) (adjusted for an obvious typo in his (58b)).

- (i) a. *Faz isso!*
 do.IMP it
 'Do it'
 b. **Não faz isso!*
 NEG do.IMP it
 'Don't do it'

For Brazilian Portuguese, Whitlam (2010) notes that the familiar imperative form “can be used with negation in very colloquial speech, although the present subjunctive is more usual in prohibitions”, consider his (iia) in contrast to Subjunctive (iib):

- (52) a. *Čitaj!*
 Read.IMP.2Sg
 ‘Read!’
 b. *Ne čitaj!*
 NEG read.IMP.2Sg
 ‘Don’t Read!’
- Bosnian/Serbian/Croatian
- (53) a. *Leggi!*
 Read.IMP.2Sg
 ‘Read!’
 b. **Non leggi!*
 NEGread.IMP.2Sg
 Int: ‘Don’t read!’
 c. *Non leggere!*
 NEG read.INF
 ‘Don’t read!’
- Italian

Theories of negative imperatives have to explain (i) which languages ban the co-occurrence of negation with the inflection characteristic of true imperatives, and (ii) how surrogate imperatives can encode the same meaning regular true imperatives with negation encode in other languages. Various syntactic, morphological, and phonological properties of both players have been enlisted to explain why in some languages negation and the inflection characteristic of positive imperatives are incompatible.

The recent literature converges on the idea that imperative inflection is licensed by a feature reflecting crucial aspects of the imperative meaning and that in certain constellations negation can disrupt this licensing relation.³⁴ Zanuttini

-
- (ii) a. *Não fica pegando no meu pé.*
 ‘Don’t keep going on at me.’
 b. *Não esquece de comprar leite.*
 ‘Don’t forget to buy milk’

The native speakers I consulted (Tarcisio Dias, Karina Bertolino, p.c.) prefer the version with the morphological imperative. I take this to suggest the possibility of on-going language change.

34 Another influential type of account is spelled out by Han (2000). According to her, imperatives contain an operator in C that encodes illocutionary force and triggers overt or covert movement of the imperative verb. If a language requires overt movement and the negation cliticizes onto the verb, the illocutionary force operator ends up in the scope of negation which is assumed to result in ungrammaticality. Surrogate imperatives lack part of the features associated with true imperatives (encoding irrealis but not directive), which is why the verb need not raise to C.

- (55) a. *Ne zaborav-i ključeve!*
 not forget.PFV-IMP keys
 ‘Don’t forget the keys!’
 (BCS, Despić 2016)
- b. *Ni slučajno joj ne recite da sam tu!*
 not by.chance her not tell-PERF.IMP that am here
 ‘Don’t tell her I’m here under any circumstances!’
 (BCS, Goncharov 2020:5b)

Despić (2016) provides a syntactic account. He assumes that imperative morphology corresponds to a feature that requires valuing by an imperative operator. This operator has to be merged as the highest operator in the clause, leading to a higher location in the presence of NegP. Building on the independently motivated assumption that perfective aspect is realized in a structurally lower position than imperfective aspect, he argues that, in the presence of negation, the perfective imperative cannot be valued by the imperative operator (in contrast to the imperfective verb, it is contained in a phase, Chomsky 2001). The problem does not result for the syntactically higher imperfective verb or for indicative verbs (which enter an agreement relation with features in a position lower than the imperative operator). For the syntactic theory, data like (55) require assumptions about how syntactic phasehood is influenced by lexical indications or even contextual assumptions about lack of control. As a challenge to the semantic theory, Despić (2016) points out that suppletive imperatives like (56) allow for both perfective and imperfective imperatives, which forces Goncharov to assume that they differ from canonical imperatives in the implicatures conveyed by the aspectual marking. On the syntactic account, Despić can assume that *moj* is inserted to serve as the exponent of the content of the imperative operator:

- (56) *Ne-moj {pojes-ti, da pojed-eš} tu jabuku!*
 NEG-IMP eat.PFV-INF, that eat.PFV-Prs2Sg that apple
 ‘Don’t eat that apple!’ BSC

More research into the aspectual marking of negative imperatives in different Slavic languages will be required in order to settle the question of the degree to which the conflicts are semantic or syntactic in nature and how exactly to explain them.

5 Current issues and recent insights

5.1 Embedded imperatives

Imperatives are well-known to appear as parts of complex linguistic expressions like conjunctions, disjunctions, and as the consequents of conditionals (*conditionalized imperatives*, Schwager 2006a; Kaufmann and Schwager 2011; Kaufmann and Kaufmann 2021):

- (57) a. *Make some tea and bring me the newspaper.*
 b. *Make some tea or bring me the newspaper.*
 c. *If you want tea, bring me the newspaper.*

Disjunctions, in particular, have triggered extensive discussion regarding the inferential properties of imperatives (*Ross' Paradox*, Ross 1967; Kaufmann 2012, 2016; Starr 2020). In all these cases, however, the imperative clause is not considered to appear in a syntactically embedded position and their semantic status is theory dependent.

In many languages, the appearance of the morphosyntactic marking considered distinctive of imperative clauses in the syntactic or semantic scope of other material is at least significantly restricted (Kaufmann 2012 and Platzack and Rosengren 2017 for discussion). Contrasts like (58a) vs. (58b) (from Han 2000) are supposed to illustrate that, for instance, imperative clauses cannot occur as indirect speech complements of *verba dicendi*. In contrast, like any other linguistic material, imperatives can appear as direct speech complements, i.e., quotes, see (57c).

- (58) a. *Give me the book!*
 b. **I demand that give me the book.*
 c. *I demand: 'Give me the book!'*

A special case is constituted by *conditional conjunctions* (CCs), which are clausal conjunctions that are interpreted like hypothetical conditionals. In many, also typologically unrelated languages, the first conjunct can be realized as what looks like an imperative clause.³⁵

- (59) a. *Give him enough money and every senator will give you access to his files.*
 b. *≈ If you give him enough money, every senator will give you access to his files.*

³⁵ For discussion and further references, see Kaufmann (2012), Keshet (2013), von Stechow and Iatridou (2017).

Culicover and Jackendoff (1997) consider CCs interface mismatches that consist in a pairing of syntactic coordination and semantic subordination. Recent works propose (almost) compositional treatments as regular conjunctions in the scope of a quantificational operator that gets restricted by focus alternatives to the (focused) second conjunct (Keshet 2013; Keshet and Medeiros 2019) or as evaluation or quantification restricted to a topicalized first conjunct (Starr, 2018; Kaufmann and Whitman, 2022).

The presumed inability for imperatives to appear in bona fide embedded positions like antecedents of regular hypothetical conditionals (e.g., English *if*-clauses), non-quotational complements of *verba dicendi* and *sentiendi*, and restrictive relative clauses led to the postulation of a ban on embedded imperatives (Sadock and Zwicky 1985, Palmer 1986). Possibly with this assumption in mind, researchers have treated imperative marking in speech complements with clear indications of proper embedding as instances of *blended discourse* (Kuno 1988 for Japanese), that is, a mix of direct and indirect speech. The Japanese complementizer *to* can introduce both direct and indirect speech. Yet, Kuno points out that the embedded clause in (60) cannot be direct speech because of the third person possessive pronoun that is anchored to the matrix subject referent, Hanako. At the same time, we find imperative morphology on the verb *kuru* ‘to come’ (viz. *koi*).

- (60) *Hanako-ga [kanozyo no ie-ni Sugu koi] to denwa-o*
 H-NOM [her GEN house-to immediately come.IMP] To phone-ACC
kakete kita
 placing came
 ‘Hanako called me up and said that “Come right now” to her house.’
 (roughly [MK]: ‘Hanako called me and told me to come to her house right away.’)

Maier (2010) offers an implementation drawing on his independently motivated account of mixed quotation, an example of which is given in (61).

- (61) *Ann said that she “could care less” about spelling.* his (1c)

Cases like (60), however, show no trace of the pragmatic effects associated with other instances of mixed quotations, which report not only what someone said but emphasize formal properties of the expression the speaker used to say it (Maier 2013). In fact, as observed by Kuno himself, even the putatively quoted imperative has to be modified to appear in the plain form. The polite form *kite kudasai* ‘come. IMP.POL’ cannot replace *koi* ‘come.IMP.PLAIN’ in (60), even if Hanako used it in the speech act that is being reported.

In the meantime, overwhelming evidence has been adduced for the existence of genuinely embedded imperatives in many different languages. In response to this, the literature has undergone what we may consider a paradigm shift. In more recent works, the focus rests on proving that the constructions under investigation are non-quotational. In some cases, syntactic material marks an embedded clause as indirect speech, as do complementizers in Old Germanic languages (Rögnvaldsson 1998; Platzack 2007) and in Slovenian (Sheppard and Golden 2002).

- (62) a. *Jak bidhir thik, at thu mildasta imfru bidh for mik oc hielp*
 I ask you, that you, dear dear virgin for me and help.IMP
mik at. . .
 me to
 ‘I ask you, dear Virgin, to pray for me and help me to. . .’
 (Old Swedish, Själinna Thröst; from Rögnvaldsson 1998)
- b. *Rekel je, da poslušaj!*
 said.M.Sg is that listen.IMP.2.Sg
 ‘He said that you should listen.’
 (Slovenian, Stegovec and Kaufmann 2015:5b)

Kaufmann (2012) observes that Colloquial German allows for complements of *sagen* ‘say’ to embed imperatives in the absence of a complementizer (similar to embedded verb-second for declarative complements), cf. (63). Here, the interpretation of the indexical *mein(en)* ‘my’ as anchored to the utterance speaker (rather than to Hans), shows that the imperative clause cannot be construed as direct speech;³⁶ Kaufmann and Poschmann (2013) confirm these data experimentally and observe parallels with imperatives in echo questions.

- (63) *Hans hat dir doch gestern schon gesagt, ruf meinen Vater an.*
 Hans has you.DAT PRT yesterday already told, call.IMP my father to
 ‘John has already told you yesterday that you should call my father.’

Adducing additional evidence from quantifier binding (cf. (64b)) and focus association, Crnič and Trinh (2009) argue the same point for English *say*:

³⁶ Platzack and Rosengren (2017) reject semantic evidence for embedding and maintain that the embedded clause is quoted after all. However, they do not provide an analysis for the interpretation assigned to the indexical.

- (64) a. *John said help me.* (\approx 'John said that you should help me.', i.e. John \neq me)
 b. *Every professor_i said buy his_i book.* Crnić and Trinh 2009:(7a)

At first glance, data along these lines appear to provide strong support for an analysis of imperative clauses not only as embeddable, but also as having a propositional interpretation (see section 2.3). However, the recent literature on speech and attitude reports is in the process of revisiting the connection between matrix clause and complement clause, using a designated Content-relation as holding between the speech event that is being reported and the denotation of the embedded clause (e.g. Kratzer 2006; Moulton 2009; Elliott 2020). Under this assumption, the embedded clause does not have to denote a proposition. Portner (2007) spells out how an embedded imperative denoting a property can be interpreted as reporting how the respective agent's To-Do list is affected in the context described by the matrix clause.

The finding that imperative clauses (that is, clauses containing their distinctive markers) can occur as the complement clauses of indirect speech reports at least in some constellations relieves linguistic theorizing from having to ensure that imperatives are categorically excluded from serving as the input to the formation of complex linguistic expressions. In fact, it becomes implausible to assume that they are inherently related to an extralinguistic event of an (attempted) speech act with a particular illocutionary force (e.g., Han 2000) or lack projections or semantic information that would be required for anchoring with respect to a linguistic context (e.g., Platzack and Rosengren 2017; Lohnstein 2000).

At the same time, it is a fact that, across languages and constructions, the embedding of imperatives is subject to restrictions beyond what we observe for other clause types. The recent literature is studying precisely these restrictions to draw conclusions about the semantic meaning of imperative clauses. For instance, while Slovenian imperatives can be embedded freely under complementizers in indirect speech reports, Stegovec and Kaufmann (2015) observe that the result is ungrammatical if the original utterance speaker is the addressee of the report (see (65a)). Stegovec (2019) points out that a corresponding report with a modal verb is grammatical (see (65b)), suggesting that indeed the imperative form is to blame for the infelicity, and not a possible pragmatic issue with self-directing:

- (65) a. **Rekel si, da več telovadi.*
 *said.M are.2 that more exercise.IMP.2
 int.: 'You said that you should exercise more.'
 b. *Rekel si, da moraš več telovaditi.*
 said.M are.2 that should.2 more exercise.INF
 'You_i said that you_i should exercise more.' Slovenian

Stegovec (2019) proceeds to argue that Slovenian canonical morphosyntactic second person imperative forms of the verb, together with first person plural inclusive ones, belong to a paradigm of directives. The first person plural exclusive and third person forms are supplied by subjunctives (particle *naj* + present indicative), which can all be interpreted roughly as ‘Agent should (really). . .’. For speech reports, he shows that all instances of co-reference between matrix and embedded subject are ungrammatical (schematically, *‘ α said that α should’). This matches well-known patterns of *subject obviation*, as observed for instance with subjunctives in Romance languages in attitude reports (Quer, 2006). Stegovec (2019) explains the restriction syntactically as an anti-locality violation in the embedded directive between its subject and a perspectival operator that is identified with the matrix subject. Assuming that the perspectival operator is identified with the utterance speaker in matrix declaratives and imperatives, he can explain the absence of morphologically marked first person singular (and plural exclusive) imperatives and the infelicity of directive *naj* subjunctives with these person values. Moreover, under standard assumptions of *interrogative flip* (Speas and Tenny 2003; Pearson 2013), in matrix interrogatives the perspectival center switches to the addressee and, in line with the empirical findings, second person directives (including canonical morphosyntactic imperatives) become infelicitous in questions, while the first person forms become acceptable. This reduces a presumed incompatibility between two different clause types (imperative and interrogative) to an obviation effect as known from the literature of speech and attitude reports (see also section 3; for further support, Kaufmann and Poschmann 2013 and Stegovec 2017). Adopting the assumptions about a perspectival center sensitive to the linguistic environment, Kaufmann (2019) replaces the anti-locality violation with a semantic analysis in terms of inherently conflicting discourse commitments (matrix case) or unresolvable presuppositions (embedded case) (see Szabolcsi 2021 for further discussion of such a semantic-pragmatic solution).

Imperatives have also 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 somewhat independent of their local context (see van der Wurff 2007a:23–25). Imperatives in restrictive relative clauses are attested at least for Ancient Greek (Medeiros 2013) and for Slovenian (Sheppard and Golden 2002). (66) is taken from Kaufmann and Stegovec (their (2b)):

- (66) *To je vino_i, ki ga_i spij, in to je vino_j, ki ga_j zlij.*
 this is wine REL 3.ACC drink.IMP and this is wine REL 3.ACC spill.IMP
 ‘This is the wine you should drink and this is the wine you should spill.’
 Slovenian

Kaufmann and Stegovec (2019) show that such relative clauses are subject to restrictions familiar from main clause imperatives. 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 (66a) vs. (66b) (their (12a) vs. (12b)):

- (67) a. #*Knjiga*, *k_i* *jo* *kupi*, *je* *povsod* *razprodana*.
 book that her buy.IMP.2 is everywhere sold out.
 ‘The book which you should buy is sold out.’
- b. *Knjiga*_{*i*}, *ki* *jo*_{*i*} *kupi* *takoj*, *ko* *bo* *na* *voljo*,
 book which her buy.IMP.2 immediately when will on available
še *ni*
 yet not out
 ‘The book, which you should buy as soon as its available, is not out yet.’

Moreover, restrictive relative clauses anchor only to definite descriptions, specific indefinites, or quantifiers in special contexts. Kaufmann and Stegovec (2019) argue that the imperatives embedded in relative clauses are associated with the same modal and presuppositional meaning as in matrix clauses. While the modal at-issue meaning becomes part of the relative clause, the presuppositional meaning projects, and therefore gets interpreted with respect to the actual utterance context. By standard assumptions, relative clause formation involves variable abstraction at the top and thus above the imperative operator. This causes its prejacent and hence some of the presuppositions to contain a bound variable. When projecting, the variable appears outside of the scope of its binder. Kaufmann and Stegovec (2019) note that, of the several strategies for forming relative clauses in Slovenian, only the one employing a resumptive pronoun can appear with imperatives. They argue that the resumptive pronoun does double duty: it is bound by the relative clause operator at the level of the at-issue meaning and is interpreted as referring to the relative clause head in the presuppositions. The case of Slovenian suggests that the availability of hosting a complementizer in the left periphery of an imperative clause (as evidenced in reported speech, cf. (62b) above) and a resumptive pronoun conspire to allow imperatives in restrictive relative clauses. This, however, does not carry over to Ancient Greek, which does not display resumptive pronouns in the relevant examples. More research is needed to determine what exactly enables languages to embed imperatives in relative clauses.³⁷

³⁷ At first glance, Japanese appears to allow for imperatives to occur in relative clauses. However, Saito (2017) adduces formal and interpretational evidence in favor of an intervening speech report layer.

5.2 Surrogate imperatives and minor directives

Canonical morphosyntactic imperatives as individuated in section 1 have received a considerable amount of systematic attention within individual and across languages. More recently, these studies also aim to learn from different clausal forms that are, however, formally and/or functionally related.

Specifically, two cases should be distinguished.³⁸ On the one hand, we find infinitivals and subjunctives appearing in the presence of negation when negation is incompatible with the realization of regular imperative morphology (surrogate imperatives, see section 4.3). In these cases, the abstract underlying structure should be the same as in languages that combine regular negation and imperative morphosyntax. As the specific modal and speech-act related exponents are hypothesized to be the same, we expect the functional potential to differ only in the presence of negation in the preadjacent. Analogously to what we see with declaratives, the resulting forms will be the unmarked negative answers in reply to a polar question:

- (68) A: *Should I call her?*
 B: *Yes, call her./ No, don't call her.*

But we also find at least subjunctives (see section 5.2), infinitivals (as in (69b)), participles (as in (69c)), and clauses marked with usually subordinating complementizers (as in (69d)) used similarly to imperatives:

- (69) a. *Steh auf!*
 get.IMP.2SG up
 b. *Aufstehen!*
 get.up.INF
 c. *Aufgestanden!*
 get.up.PTCP
 d. *Dass du jetzt aufstehst!*
 hat you now get.up.2SG.PRES.IND
 Roughly (but see below), all: 'Get up!' German

Forms that optionally replace the corresponding morphosyntactic imperatives (and their surrogates as triggered for instance by the presence of negation), typically differ slightly from them in terms of functional potential. This suggests that

³⁸ Isac (2015) and Kaufmann (2019) call both "surrogate imperatives".

the relevant formal differences correspond to differences in semantic interpretation, which translate to the observed differences in functional potential. For the purpose of comparing different such form types within and across languages, it is useful to group them together as *minor directives* and investigate which syntactic and semantic building blocks they might share with each other and with morpho-syntactic imperatives.

von Fintel and Iatridou (2017) observe that many such minor directives can only be used for command-like utterances (*strong directives*). Hebrew infinitivals, for instance, can be used for commands, but not to express acquiescence; in contrast, future tense is used interchangeably with the morphosyntactic imperative (their (10),(11)):

- (70) a. *la-shevet!*
 INF-sit
 ‘Sit!’ command only
- b. *te- xabek ot -o!*
 FUT.2- hug(sg.M) ACC -3sg.M
 ‘Hug him!’ command, acquiescence, . . .

Some of these forms have a generic flavor and are not felt to address a specific addressee, that is, an *interlocutor-addressee* (Portner et al. 2019). Portner et al. (2019) discuss Korean impersonal imperatives, which differ minimally from regular morphosyntactic imperatives in that they lack a speech style particle preceding the clause type marker (the plain speech-style forms *-la* vs. *-e-la* in their (17a)):

- (71) *Choysen-ul ta ha-la/ela!*
 best-ACC all do-IMP.PLN
 ‘Do your best!’

In main clause uses, the forms without speech style particle are used when addressing people in general, e.g. in rally cries, protest cries, or mottos. Portner et al. (2019) relate this difference from canonical morphosyntactic imperatives to the absence of a left-peripheral projection *cp*, which they take to encode information about the speaker-interlocutor relation. *cp* has to interact directly with the discourse representation and cannot appear as the complement of speech act predicates, for instance. Embedded imperatives in Korean are correctly predicted to lack the speech-style particle.

Amongst a series of minor directives in English, *General Prohibitives* (GPs) (Iatridou 2021 calls them *Negation-licensed commands*) and *Goal Commands* (GoalCs) have recently received some attention in the literature (terms from Donovan 2022).

Both constructions lack a verbal form: GoalCs combine a theme with a goal denoting phrase (see (72a)), while GPs employ a negative indefinite or exhaustified nominal, as exemplified in (72b) and (72c), respectively:

- (72) a. *Hands off the table!*
 b. *No dogs (on the couch)!*
 c. *Only dogs (on the couch)!*

GoalCs fit von Fintel and Iatridou's (2017) category of strong directives as they can be used only for commands or instructions for immediate action (Donovan 2022). In contrast, GPs differ from imperatives in that they invariably evoke a general rule. Donovan (2022) shows that they pattern with canonical imperatives in committing the speaker to accepting the relevant rules as a guide for action (compare Kaufmann's 2012 decisive modality, see section 2.3). Yet, in contrast to canonical imperatives, with GPs, the content of these rules can be contested felicitously by the addressee:

- (73) A: *No dogs on the couch!*
 a. . . . #*But I don't care if you let yours get on.*
 b. . . . B: *No, that's not true. They changed the rules.*

- (74) A: *Keep any dogs off the couch!*
 . . . #*But I don't care if you let yours get on.*
 . . . B: #*No, that's not true. They changed the rules.*

Donovan (2022) analyzes GPs and GoalCs as encoding different combinations of ingredients (similar to those) found in the logical form of imperative clauses. GoalCs specifically are assumed to arise from deletion of parts of an existential construction containing a possibility participle *allowed* (schematically: '(There is) . . . Theme (allowed) (Goal.Modifier)'). Following assumptions in Keshet and Medeiros (2019) for conditional conjunctions, Donovan argues that Kaufmann's (2012) imperative operator should be split into a presuppositional and a modal at-issue component, where the latter can alternatively be realized by *allowed*, which gets deleted. While the details of the mechanism underlying the interplay of licensing and deletion may require further work, such careful investigations of minor directives hold important insights for what meaning components are conventionally associated with morphosyntactic imperatives and with other directives.

In addition to overtly modalized sentences, declaratives about future actions of the addressee can also be used to give commands. Consider (75) as used by a fortune teller or by a military commander (from Recanati 1987):

(75) *You will clean the latrines.*

For English, Recanati (1987) argues that this flexibility can be captured satisfactorily only if declaratives are illocutionarily underspecified and do not encode their canonical use of asserting semantically. Interestingly, in Japanese, non-past can also be used for directive speech acts in place of the canonical imperative (e.g. *hasir-u* ‘run-NPST’ for *hasir-e* ‘run-IMP.2’; Ihara and Noguchi 2018, Ihara 2020).³⁹ However, Noguchi (2022) discusses several different contexts to establish that such non-past directives can be used in place of imperatives only if the speaker wants to call out the addressee for irrational behavior regarding the choice of action encoded by the prejacent. For instance, a non-past directive *Hasir-u (yo)!* ‘run-NPST (SFP)’ is felicitously used by a PE teacher who sees signs that his students are not following a well-established rule to run around the grounds for no good reason. In contrast, if the teacher means to install a new rule or wants to encourage his well-intentioned students to get going, only the canonical morphosyntactic imperative can be used. Noguchi (2022) considers these language specific restrictions evidence against a pragmatic solution and argues that non-past sentence in Japanese are ambiguous between regular declaratives and sentences with a covert modal operator that yields an imperative-like meaning.

Another possible point of variation between various directives regards the involvement of the addressee (see also section 4.1). Morphosyntactic imperatives involve (a subset of) the addressee(s) as the subject of the prejacent proposition and typically also as the individual that is supposed to act, making the form mostly paraphrasable as ‘See to it that. . .’. Minor directives formed from subjunctives or stand-alone complement-clauses formally allow for non-second person subjects as well (Isac 2015; Stegovec 2019; Oikonomou, 2016), and some languages are analyzed as having a full person paradigm to match the second person forms found in canonical morphosyntactic imperatives (e.g., Zanuttini 2008 for Bhojpuri). For different languages, authors have reached different conclusions as to whether these forms can be paraphrased with a *see to it that*-prefix that reflects an obligation the speaker means to impose on the addressee. As was pointed out in section 4.1, Zanuttini et al. (2012) and Isac (2015) argue for a conventionally encoded *see to it that*-component in Bhojpuri, Italian, and in Romanian *să*-subjunctives. Stegovec (2019) rejects this for Slovenian *naj*-subjunctives. He points out two patterns for Slovenian *naj* that appear to distinguish it from Romanian *să*-subjunctives: (i) cases with non-second person subjects will often imply an obligation for the addressee to jump to action, but do not

³⁹ Past (e.g. *hasi-ta* ‘run-PAST’) can be used directly as well Arita (2015), and comes with constraints partly similar to what Gärtner (2013) discusses for German perfect participles.

conventionally encode it, (ii) the *naj* construction is blocked in the cases for which a morphosyntactic imperative form exists. Moreover, Kaufmann (2022) observes that Romanian *să*-subjunctives differ from morphosyntactic imperatives in being unable to occur in wishes. This suggests that, unlike canonical imperatives, Romanian *să*-subjunctives conventionally encode a *see to it that*-component (subject to speaker variation; Simona Herdan, p.c., reports a variety that differs from this but also from Slovenian *naj*). In contrast, Slovenian *naj*-subjunctives can appear in wishes, confirming Stegovec's (2019) claim that they realize the same material as morphosyntactic imperatives do, flexible only in person value and blocked for person values where a morphological imperative form is available (e.g., in directive use, *pomaga-j* 'help-IMP.2SG' vs. **naj pomaga-š* 'SBJV help-IND.PRES.2SG').

More crosslinguistic research into directly used subjunctives and other minor directives will be needed to fully understand what meaning components are conventionally encoded and which can be derived pragmatically.

6 Conclusions

The connection between specific sentential form types and the prototypical function of ordering allows us to study imperatives as one of three major clause types across languages. Beyond their canonical function, imperatives appear associated with a surprisingly broad range of speech acts (performed directly), all of which can be understood roughly as selecting a particular course of events as described by the prejacent as optimal. In this chapter, I have discussed challenges for the semantic and syntactic modeling, relating these investigations to other grammatical categories as occurring within imperatives as well as to imperatives as parts of larger linguistic expressions and to minor clause types with imperative-like functions. I hope to have shown that, despite considerable convergence in the recent theoretical literature, many open questions remain, answers to which we may be able to find especially when exploring hitherto less researched languages and constructions.

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