# **General Prohibition**

Michael Donovan

## October 27, 2020; Comments Welcome

## **1** Introduction

This paper is concerned with a construction which I term *general prohibition*. I co-opt the term *prohibitive* from the literature on imperatives (Zanuttini (1997), Aikhenvald (1999), and Xrakovski (2001), among others) and apply it additionally to constructions like those seen below in (1). General prohibitives can commonly be seen on public signs or notices.<sup>1</sup>

- (1) a. No jumping on the sofa!
  - b. No crying in baseball!
  - c. No spoilers in this thread!
  - d. Visitors before 10 P.M. only!

In this paper, "General Prohibitive" (GP) refers to an expression like those in (1) that contains "no" followed by a noun, or a noun followed by "only." This noun can be a gerund (a and b above), but does not have to be (c and d above). A crucial property of GPs is that they are typically interpreted as being *general*, or *universal*. The default interpretation of general prohibition is that the content of the prohibition is a violation of a rule or ordinance - and anyone who violates it is in violation of the rule. Thus, an utterance like "No jumping on the sofa!" receives the default interpretation that no one is allowed to jump on the sofa, and anyone who jumps on the sofa is violating a rule. It is not necessary for the "rule" to be a literal law, merely something in a given context that is not allowed. This is in contrast to the imperative "Don't jump on the sofa!," which receives the default interpretation of applying only to the addressee(s).

As we will see in the course of this paper, GPs possess a highly unusual combination of properties. At first glance, it is unclear whether GPs are a member of the clause type DECLARATIVE or IMPERATIVE. Indeed, I will argue in this paper that the only way to make sense of this construction is by combining DECLARATIVE and IMPERATIVE properties. This move amounts to arguing against the existence of *closed* clause-type systems like the ones argued for in Sadock & Zwicky (1985) and Portner (2004), where each sentence is a member of one and only one clause type.

<sup>&</sup>lt;sup>1</sup>Sadock & Zwicky (1985); Kaufmann (2012) discuss the plausibility of PROHIBITIVE as a separate clause type from DECLARATIVE, INTERROGATIVE, AND IMPERATIVE and argue against it. The term *prohibitive* is therefore not intended to carry any clause-type implications in this paper.

The analysis presented here will instead pursue combining an imperative operator with a declarative clause. Doing so explains why GPs possess both declarative and imperative properties; they have the morphosyntax of a declarative clause and the semantic/pragmatic update provided by an imperative operator.

Separating an operator from its associated clause type is a significant departure from what is standardly assumed; particularly in the case of imperatives (Han 1998; Kaufmann 2012; Portner 2007). There is typically assumed to be a 1:1 correspondence between the imperative operator and imperative morphology. In principle, however, there is no reason why an operator cannot be conventionally associated with a particular clause type, yet appear in environments outside of that conventional use. What I propose herein, therefore, is essentially a non-canonical environment for the imperative operator.

The format of the paper is as follows. Section 2 describes some basic properties of GPs. Section 3 describes the ways in which GPs pattern with declaratives, arguing that their syntax patterns with declaratives more than imperatives. Section 4 describes the ways in which GPs pattern with imperatives, arguing that their semantic/pragmatic update more closely matches imperatives than declaratives. Section 5 provides a hybrid analysis of GPs, combining an imperative operator with a declarative clause. Section 6 concludes.

## **2** Basic Properties of General Prohibitives

This section will focus on some of the basic syntactic properties of GPs. It will show that their overt material is nominal, but that there is a covert VP with the content "allowed."

#### 2.1 No in General Prohibitives

Before addressing the mixed declarative and imperative properties of GPs, it is necessary to establish that their overt content is nominal, not verbal. GPs most typically conjoin "no" and a noun. When GPs have been discussed in the literature, the construction has been mostly considered to be limited to gerunds (Seiss et al. 2008; Hudson 2003; Iatridou 2019). Thus, the object of study, to the limited extent that this construction has been observed, has typically been gerundal constructions like in (2) below.<sup>2</sup>

(2) No jumping on the bed!

 (1) No salta-r en la cama! no jump-inf in the.fem bed
 'No jumping on the bed!'

See Iatridou (2019) for extensive discussion on the cross-linguistic properties of similar constructions.

<sup>&</sup>lt;sup>2</sup>Many languages utilize an *infinitival* rather than a gerund. For example, the title of the children's book, *No Jumping on the Bed!*, is translated into Spanish as the following.

It is not correct, however, to limit the scope of discussion to examples with gerunds like (2). GPs are actually quite permissive in terms of what type of nouns can participate. Along-side gerunds, basic nouns, eventive nouns, derived nouns, mass nouns, compounds, nouns with complements, and nouns with relative clauses are all grammatical in GPs.

- (3) a. No swimming!
  - b. No dolphins!
  - c. No horseplay!
  - d. No destruction!
  - e. No coffee!
  - f. No soap operas!
  - g. No theories that the world is ending!
  - h. No dogs that just drank from the toilet!

It is incorrect, therefore, to assume that GPs have any special relationship with gerunds, as they appear with a broad class of nouns. If gerunds are nouns, their participation in GPs is explained simply by virtue of gerunds being a type of noun. Gerunds are well-known to be nominal in their external distribution (Abney 1987), and so I assume here that they are one example among many of nominals that can appear in GPs. There are several types of nouns that cannot appear with "no" in GPs, however. Proper names, pronouns, and nouns with determiners are all impossible.<sup>3</sup>

- (4) a. \*No Gordon Ramsay in my basement!
  - b. \*No you in my apartment!
  - c. \*No these dogs at work!
  - d. \*No some students in my office after 6 P.M.!

These restrictions are straightforward if the "no" in GPs is analyzed as a determiner. Given that "no" is well-known to be a determiner in English (Huddleston & Pullum 2002), the most reasonable analysis of GPs is that "no" is a determiner in the construction, which is flexible in the type of N it can take. For the case of (4a) and (4b), determiners in English cannot combine with proper names or pronouns. For (4c) and (4d), there cannot be multiple determiners associated with the same noun. In light of the data in (3) and (4), I propose that the overt material present in GPs is simply a *traditional noun phrase* with the prohibited item as the head.<sup>4</sup> A simple structure of this NP can be seen below.

(1) ?No Gordon Ramsays in my basement!

 $^{4}$ By traditional noun phrase, I mean that it can either be an NP or DP, as an atheoretical notion of the nominal projection. I will use *NP* throughout this paper.

<sup>&</sup>lt;sup>3</sup>The pluralized version sounds much better, but of course refers to any individual with that name, and not a specific individual.

(5) NP Det N' No | N dolphins

One straightforward reason to think that the overt material present in a GP is a traditional noun phrase is the possibility of adjectival modification, even of gerunds.

- (6) a. No more *quick* thinking!
  - b. No pink dolphins!

Gerunds and underived simple nouns act the same with regards to adjectival modification. Of course, adverbial modification of gerunds is also possible, whereas this is not possible for underived nouns like in (7b).

- (7) a. No singing loudly!
  - b. \*No dogs loudly!

The most straightforward explanation of this asymmetry is that there is a verb phrase in gerunds that is embedded inside a noun phrase, and that verbal element can be modified by adverbs. This type of nominalized gerund structure has been explicitly proposed before (Reuland 1983; Abney 1987; Baker 2005), and has been indirectly assumed in other work. I will assume that the structure for gerunds must be something like the following in (8), with a VP embedded somewhere under an NP, without arguing for any specific analysis of the structure for English gerunds.<sup>5</sup>

- i. John's running marathons got him in shape. (POSS-ing)
- ii. John running marathons got him in shape. (ACC-ing)
- iii. John's running of marathons got him in shape. (ing-of)

Although it's impossible to go into all the issues surrounding gerunds here, I will note that gerundal GPs can take either direct objects or prepositional phrases with no obvious change in meaning (could be ACC-ing or ing-of).

- i. No singing of operas!
- ii. No singing operas!

However, the case presented here is a tricky one - as gerunds with determiners are supposed to be unable to take objects (Wasow & Roeper 1972; Abney 1987). Hudson (2003) proposes that we need a 4th type of gerund to accommodate these facts ("No-DETing"); Iatridou (2019) reaches a similar conclusion. These proposals seem reasonable to me.

<sup>&</sup>lt;sup>5</sup>Within the generative tradition of analyzing gerunds, there has traditionally been a distinction between three types of English gerunds.

This structure allows for the generalization that gerunds possess mixed nominal and verbal properties while allowing their syntactic distribution to be NP-like. This is essential for capturing the generalization that gerundal GPs act identically to bare noun GPs, which are uncontroversially nominal. Therefore, both gerunds and simple nouns occur under the same syntactic node (NP), and can have the same syntactic distribution.

This analysis makes the case of gerunds unexceptional; they are nouns, and are therefore available to be the complement of the determiner "no." Interestingly, as discussed by Iatridou (2019) for "not" and "never," other forms of negation are not possible in forming GPs.

- (9) a. No dolphins!
  - b. \*Don't dolphins!
  - c. (#Prohibitive) Not dolphins!
  - d. \*None of dolphins!
  - e. (#Prohibitive) Never dolphins!
  - f. \*Non-dolphins!

Although (9c) and (9e) are grammatical fragments, they are not felicitous in the same context as (9a). (9c), for example, is possible as an exclamation.

(10) A: I heard dolphins are going extinct.B: Not dolphins!

Crucially for the purposes of analyzing GPs, (9c) cannot be used as a command that means "Dolphins are not allowed." It is therefore not a GP, and not the subject of inquiry here.

It is worth pointing out that, unlike standard imperatives in English, the negation is mandatory to produce a GP. There is no corresponding construction *general permissive* or *universal obligation* in the absence of negation. Thus, "positive" versions of GPs are simply ungrammatical.

- (11) a. \*Dolphins!
  - b. \*Swimming in the pool!

Iatridou (2019) refers to the phenomenon in (11) as being one example of what she terms a "Negation-Licensed Command." Given this view that it is negation licensing the command, it is not just that "no" is the only form of negation that is compatible with GPs, but that GPs require "no." The next subsection will show that GPs can also be formed with "only."

There is additional evidence outside of English that the negation is forming a constituent with the noun. In German, the determiner kein(e) must obligatorily agree with the noun it modifies.<sup>6</sup> In German GPs, there is agreement present between kein(e) and the noun. A count noun must bear plural marking on both the determiner and noun, while a mass noun will bear neither.<sup>7</sup>

<sup>&</sup>lt;sup>6</sup>Note that "kein(e)" is only a determiner and cannot be used as sentential negation or the negation present in short answers (Curme 1905).

<sup>&</sup>lt;sup>7</sup>Thanks to Solveig Bosse and Janina Böcher (p.c.) for their judgments on German.

(12) a. Kein-e Hund-e im Badezimmer! NO-PL DOG-PL IN.THE BATHROOM "No dogs in the bathroom!"

> b. Kein Alkohol im Badezimmer! NO ALCOHOL IN.THE BATHROOM "No alcohol in the bathroom!"

(German)

Taken in combination, this information leads to the conclusion that the overt "No + X" material in a GP is a noun phrase, with "no" and the noun in the same phrase. Gerunds are a type of noun that can participate, but the construction is not limited to gerunds.

#### 2.1.1 Only in General Prohibitives

Despite the fact that GPs appear to be highly limited in the form of the negation that they are compatible with, an analogous construction to "no GPs" can be found with "only." All of the noun phrases that were previously possible with "no" are also possible with "only."

- (13) a. Swimming only!
  - b. Dolphins only!
  - c. Horseplay only!
  - d. Destruction only!
  - e. Coffee only!
  - f. Soap operas only!
  - g. Theories that the world is ending only!
  - h. Dogs that just drank from the toilet only!

The distribution of NPs that are compatible with "only" is not exactly equivalent to the distribution of NPs compatible with "no," however. Some of the restrictions on "no GPs" are not present with "only GPs." For example, proper names are possible with "only," but not with "no." If we imagine a scenario in which Artemis, Demeter, and Aphrodite are about to enter into a bank, (14a) can be felicitously uttered to prohibit the alternatives, but (14b) cannot be used to prohibit specifically Artemis.

- (14) a. Artemis only!
  - b. \*No Artemis!

Rather than taking the data in (14) to show that we are dealing with two fundamentally different constructions, it is clear that the distributional difference is due to the fact that "no" and "only" are different parts of speech. Namely, "no" is a determiner, and "only" is not. "Only" appears much more naturally after the noun, rather than before.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup>Thanks to Satoshi Tomioka, p.c., for pointing this out.

- (15) a. Artemis only!
  - b. ??Only Artemis!

Given that "only" can appear after the noun, it seems unlikely to be a determiner in this construction, given that English determiners precede the nouns they are associated with.<sup>9</sup> Additionally, if "allowed" is added to the expression (see Section 2.2), the position of "only" seems less restricted.<sup>10</sup>

- (16) a. Only Artemis allowed!
  - b. ?Artemis only allowed!
  - c. Artemis allowed only!

Determiners can actually appear in "only" GPs, given the right context. If the NP that appears in the "only" GP is salient in the context, or was given explicitly prior in the discourse, an exchange like (17) below becomes possible.

(17) A: Which of these are allowed in? (of dogs, cats, giraffes)B: The dogs only!

An analysis of the correct attachment position of "only" is beyond the scope of this paper, but it seems clear based on the data in (15), (16), and (17) that it cannot be a determiner, and is most likely an adverb. Given that "only" is not a determiner, why can it appear in GPs at all? While Iatridou (2019) suggests that the relevant factor in licensing GPs is the negation, I propose that the relevant factor is exhaustification.

Both "no" and "only" are elements that limit future possibilities. In the case of "no," it rules out the noun that it occurs with. In the case of "only," it generates a set of focus alternatives based on the noun it co-occurs with, and then rules those focus alternatives out (Rooth 1992). Thus, an utterance of (14a) will produce the following set of negated focus alternatives.<sup>11</sup>

(18) Artemis only!  $\rightarrow$  {Demeter is not allowed, Aphrodite is not allowed, etc.}

- (1) a. Only Catherine, Duchess of Cambridge!
  - b. ?Catherine, Duchess of Cambridge only!

<sup>10</sup>Some speakers seem to find the version with "only" after the noun and before "allowed" unacceptable. <sup>11</sup>Note that the focus alternatives are still generated even though their explicit grammatical form is actually not a possible GP.

(1) \*No Demeter!

This serves as evidence that generated focus alternatives do not themselves have to be valid possible utterances.

<sup>&</sup>lt;sup>9</sup>As an anonymous reviewer points out, the phonological weight of the NP involved may affect the position of "only." Only sounds much better preceding a "heavier" NP.

I will treat "no" and "only" therefore as performing a similar semantic function, eliminating future possibilities, which is required by GPs. The difference between "no" GPs and "only" GPs is therefore a consequence of the part of speech that English utilizes for each exhaustifying element. There is a semantic restriction that there must be some element, whether explicit or in the set of focus alternatives, which is ruled out by the utterance of a GP. Therefore, GPs can only ever be used to *prohibit*, and never to *permit*.

## 2.2 The Covert VP

The null hypothesis in evaluating the structure of GPs is the "what you see is what you get" approach, where the overt material is all that is present structurally. In the previous section, we established that the overt material of GPs is a noun phrase, that can appear with "no" or "only." The null hypothesis, therefore, should be that GPs consist only of a noun phrase. There is evidence, however, that there is a VP in the structure of GPs. In the following examples, a temporal modifier adjacent to the NP is acceptable.

- (19) a. No dogs until I say so!
  - b. No cell phones before noon!

It is not plausible that these temporal modifiers could be modifying the NP directly. Certain NPs that appear in GPs could not possibly be eventive ('cell phones'). Additionally, temporal modifiers like the ones in (19) are not capable of modifying the same NPs in other constructions, as seen in (20).

- (20) a. \*No dogs until I say so are worth putting in the kennel.
  - b. \*No cell phones before noon were seen.

There is evidence, therefore, for covert structure in (19) that is absent in (20), and evidence that the adverbial modifiers modify this covert structure. A reasonable explanation is that the temporal modifiers in (19) are modifying VP structure that is absent in (20). What then, is the material of this VP, given that it does not appear overtly? There are very good reasons to believe the content of the VP is "allowed." One intuitive and appealing reason to analyze GPs as containing such a predicate is that GPs can add the word "allowed" with no change in meaning.<sup>12</sup>

- (21) a. No dolphins allowed!
  - b. No smoking allowed!

There is no perceptible difference in meaning between "No dolphins!" and "No dolphins allowed!" The two expressions seem equivalent in every way. The examples in (21) can be restated with the adverbial modifiers present, again with no change in meaning.

<sup>&</sup>lt;sup>12</sup>Synonyms of "allowed" can also appear here.

<sup>(1)</sup> a. No dolphins permitted!

- (22) a. No dogs allowed *until I say so*!
  - b. No cell phones allowed before noon!

Note that the semantics seems to derive a meaning in which the prohibition is restricted by the time specified in the temporal modifier. Thus, the meaning of an utterance like (22b) is that before noon, cell phones are not allowed. At times outside of what is specified, we have no explicit information. This meaning is derived both for the GP that has "allowed" as an explicit element (22b) and the GP that does not (19b).

Equivalent expressions of general prohibition in other languages often require the word "allowed" or "forbidden" to be explicitly stated. The following examples, from Uzbek, show that the possibility modal "mumkin" is required to be explicitly stated in prohibitives.<sup>13</sup>

(23) a. Chek-ish mumkin e-mas SMOKE-NMLZR POSSIBLE E-NEG
'No smoking! / Smoking is not possible!'
b. \*Chek-ish e-mas SMOKE-NMLZR E-NEG
'No smoking! / Smoking is not possible!'

I take it, then, as a peculiarity of individual languages whether or not "allowed" can be omitted, and will treat it as a syntactically present predicate even when not pronounced. English is capable of eliding the predicate, as is German (12), but Uzbek is not. This predicate can be modified by temporal adjuncts, and its presence explains why GPs seem to mean the content of the GP is forbidden, whether or not the word "allowed" is expressed overtly. The question remains as to why "allowed" can be optionally added or removed with no obvious change in meaning or force, but I will assume that it is present in the derivation even when not pronounced.<sup>14</sup>

- (1) a. No playing piano!
  - b. No playing of piano!
  - c. No playing of piano allowed!
  - d. \*No playing piano allowed!

However, every English speaker that I asked found (1c) above significantly worse than (1d). Many speakers find (1d) perfectly acceptable, and examples like (1d) can be found on the internet.

(2) No taking photos allowed (https://www.tcbsbm.net/events/tasa-tasb/)

Those speakers who find (1d) unacceptable may find Acc-ing gerunds with adjectival passives unacceptable in general. One speaker who found (1d) unacceptable also found the following unacceptable.

(3) \*Buying tickets required.

I take this to show that all types of gerunds are possible in principle in GPs, with every combination of "allowed" present or absent, though there may be speaker variation that rules out some combinations for some speakers.

<sup>&</sup>lt;sup>13</sup>Thanks to Shakhlo Nematova, p.c., for the Uzbek data.

<sup>&</sup>lt;sup>14</sup>Iatridou (2019) argues that gerundal GPs with "allowed" cannot take direct objects, but can take PPs. The following contrast is argued for therein.

Any string of "No + X" uttered as a command will always receive the interpretation of "not allowed," despite the existence of other theoretically possible meanings.

(24) No coffee!  $\neq$  No coffee is required, No coffee was found, No coffee was seen, etc.

I take this as evidence that "No + NP" can act like a normal NP in the syntax, but only the predicate "allowed" can be dropped. Thus, when "No + NP" strings are pronounced without an overt predicate, the interpretation is obligatorily "allowed" and not another theoretically possible predicate. This predicate is always present in GPs and is available for modification, even when not overtly pronounced. It is also fixed in the passive, the active meaning is not possible.

(25) No prison guards!  $\neq$  No prison guards allow...

The proper analysis of GPs must therefore not only involve a VP, but involve a VP that is fixed in the passive (see Section 5).

## **3** Declarative Properties of General Prohibitives

This section will focus on describing the properties of GPs that pattern with declarative clauses. The conclusion will be that their morphosyntax patterns with declarative clauses in every relevant respect, and never with imperative clauses.

## 3.1 Subject of the Clause

Section 2.2 established that GPs have a VP which is sometimes unpronounced, but always present syntactically. The purpose of this section will be to establish that the subject of GPs is the expletive subject *"there."* This is in contrast to what we would expect if GPs were IMPERATIVE clause type, as imperatives cannot have existential subjects, and are well-known to be restricted to having the addressee as a syntactic subject (Zanuttini 2008; Potsdam 2017).

It may initially be tempting to try to analyze GPs as covert imperative clauses. The pragmatic update between the following traditional imperative and GP seem roughly equivalent.

- (26) a. No smoking!
  - b. Don't smoke!

While (26a) may be more appropriate for a general audience, and (26b) may be more appropriate targeted at a specific individual, their meaning does not appear wildly divergent. Despite the superficial similarity that GPs have to traditional imperatives, I do not think it wise to analyze them as covert members of imperative clause type, at least in the sense of morphosyntactic clause type that is typically discussed in generative grammar.<sup>15</sup> This is because GPs differ from traditional imperatives in several relevant morphosyntactic respects. Traditional imperative clauses are well-known to require that their subject be some subset of the addressees. Zanuttini (2008) shows that

<sup>&</sup>lt;sup>15</sup>c.f. Sadock & Zwicky (1985) for extensive discussion.

imperatives can bind 2nd person pronouns even with 3rd person subjects (27), an option which is not possible in declaratives or interrogatives (28).

- (27) a. Everyone<sub>i</sub> raise ( $his_i/her_i/their_i$ )/your<sub>i</sub> hand!
  - b. Someone<sub>i</sub> raise (his<sub>i</sub>/her<sub>i</sub>/their<sub>i</sub>)/your<sub>i</sub> hand!
- (28) a. Everyone<sub>i</sub> should raise his<sub>i</sub>/her<sub>i</sub>/their<sub>i</sub>/\*your<sub>i</sub> hand.
  b. Should everyone<sub>i</sub> raise his<sub>i</sub>/her<sub>i</sub>/their<sub>i</sub>/\*your<sub>i</sub> hand? (Zanuttini 2008)

Zwicky (1988) cites additional evidence from tag questions and binding to convincingly show that null subjects in imperatives must bear 2nd person features.

(29) a. Give me a hand with this penguin, won't you / \*he?b. Make yourself / \*ourselves a drink! (Zwicky 1988)

It is standardly assumed the material in a tag in English must match whatever is present in Spec-TP and  $T^0$  (Culicover 1992). As such, 2nd person tags are taken to indicate that the subject must also be 2nd person for imperatives. It might initially seem promising to posit a 2nd person subject for GPs as well, given the grammaticality of a 2nd person reflexive in (30).

(30) No hitting yourself!

However, it is clear that 'yourself' in (30) can refer to an impersonal 'you' which is the subject of the gerund rather than a true addressee-restricted subject like in imperatives. For instance, 'oneself' is also possible in GPs in the same situation as (30), whereas it is never possible in standard imperatives, or declaratives with a potential 2nd person binder.

- (31) a. No hitting oneself!
  - b. \*Make oneself a drink!
  - c. \*You saw oneself.

Additionally, it is possible to adjoin 'for' phrases to GPs, yet when a 2nd person non-reflexive pronoun is part of the adjoined phrase, this is not a binding violation. A violation is incurred with an overt "you" in a declarative and a traditional imperative, however.

- (32) a. No candy for you / \*yourself!
  - b. You brought candy for \*you / yourself.
  - c. Don't bring candy for yourself / \*you!

Portner et al. (2019) argue that the subject of constructions like those in (31a) is a non-specific addressee. Given that "you" is capable of being generic in English, the non-specific addressee is capable of binding either "yourself" or "oneself." While I am sympathetic towards the goals espoused by Portner et al. (2019) to understand the morphosyntactic manifestations of the addressee feature, it is doubtful that such a non-specific addressee could be the subject of GPs. 1st and 3rd

person reflexives are available to GPs in the right context, neither of which are ever available to standard imperatives in English.<sup>16</sup>

- (33) a. "OK, so no making myself scarce" ("Soothing Music for Stray Cats" by Jayne Joso)
  - b. "No making himself withstand something too strong, no requiring himself to "break through" or "tough it out." (http://archive.skoll.org/2011/03/15/expanding-your-window-of-tolerance-increasing-effectiveness-by-staying-present-in-the-moment/)
  - c. \*Don't sell myself short! (Talking to self in mirror)

These facts lead to the conclusion that the subject binding this range of reflexive pronouns is uncontrolled PRO. This uncontrolled PRO is most naturally the subject of the gerund itself within the NP.



It is not plausible, however, that PRO could be the syntactic subject of GPs that lack gerunds. There is no possibility of binding reflexives in "for" phrases in GPs that lack gerunds.

(35) \*No dogs for myself/yourself/himself/ourselves!

If the addressee cannot be the subject of a GP, nor can PRO, then what can be? Evidence from tags shows that the subject of GPs must be "*there*." There is a clear contrast between a tag containing "there" and possible alternatives. This is true even in the cases where a gerund binds a reflexive within the GP (36c).

(36) a. No smoking allowed! Actually, is there? / \*are you? / \*is it?

- b. No trucks allowed! Actually, are there? / \*are you? / \*is it?
- c. No hitting yourself! Actually, is there? / \*are you? / \*is it?
- d. Three passengers only allowed in the cockpit! Actually, are there? / \*are you? / \*is it?

Given that tags are standardly assumed to match the material in Spec-TP and  $T^0$ , the most reasonable conclusion is that the subject of this clause is in fact *"there,"* and that the verb is

<sup>&</sup>lt;sup>16</sup>See Potsdam (2017) for 3rd person subjects and binding possibilities in English.

*"is/are."*<sup>17</sup> The subject of the sentence and the verb are obligatorily elided. A derivation of this can be seen below in (37).



Existential subjects are possible in declaratives and interrogatives. However, "there" is never a possible subject in imperatives.

- (38) a. \*There be light!
  - b. \*There (not) be dancing!

It seems, therefore, that GPs cannot be a member of IMPERATIVE clause type, because GPs have existential subjects, and imperatives do not permit existential subjects. Crucially, the fact that the subject is existential has consequences for the interpretation of GPs. Traditional imperatives exhort the addressee to take action because the addressee is the syntactic subject of the imperative. The obligation on the addressee is left more vague when a GP is uttered. Consider the following scenario. There is a rule in the bar against smoking. However, some of the patrons break the rule late at night. The wait staff never breaks the rule. The owner can felicitously utter (39a), but not (39b), to the wait staff.

- (39) a. Remember, no smoking in here.
  - b. #Remember, don't smoke in here.

In the case of a standard imperative, the syntax requires that the addressee is the subject of the imperative. The semantic update of an imperative, therefore, is that the addressee must make the content of the imperative become true. An imperative like (39b) is therefore infelicitous, because the addressee never smokes, and therefore cannot be felicitously commanded not to smoke. In the case of a GP, the semantic update provides the addressee with a much more vague update. This is a desirable result. As we will see in Section 5, an utterance of (39a) amounts to the speaker committing themself to a preference for smoking to not be allowed. Because this is the update, it can be uttered felicitously to individuals who are not themselves smoking in a way that an imperative cannot.

<sup>&</sup>lt;sup>17</sup>Note that tags on "only" GPs seem much worse without a numeral. (Thanks to an anonymous reviewer for pointing the fact that not all tags of "only" are ungrammatical, by providing the grammatical example (36d).

<sup>(1)</sup> Crocodiles only! Actually, \*aren't there? / \*are there? / \*is it? / \*isn't it? / \*aren't they?

To recap, there is an overwhelming amount of evidence that GPs and traditional imperatives cannot have the same syntactic subject. There is a great deal of evidence supporting the fact that the syntactic subject of traditional imperatives is addressee-restricted, whereas the syntactic subject of GPs is existential.

#### 3.1.1 Two Ellipsis Processes

Iatridou (2019) argues that ellipsis cannot derive a string like "No smoking!" from a structure like (37), because the ellipsis process needed to derive such a string does not delete a constituent, and is otherwise not attested in English. It involves both obligatory non-constituent deletion of the subject and verb, along with an optional deletion of the adjectival passive "allowed." However, the fact that one ellipsis is mandatory while the other is optional strongly suggests that the ellipsis processes must be distinct from one another. I will show here that both ellipsis processes occur in English independently in environments outside of GPs.

There is an ellipsis process in English that deletes an auxiliary and a subject in informal questions.

- (40) a. Have you ever been to Paris?
  - b. Are you going up?

English, therefore, is capable of deleting strings of a subject and an auxiliary, at least in some configurations. Deletion of the subject and auxiliary is also possible in existential declarative uses of "No + X" strings, which are disambiguated from GPs in spoken language by prosody, and could not add "allowed" without significantly changing the meaning. For (41), we can imagine a person going around room to room, who has been tasked with seeing if there is any dog inside.

(41) (Checks room) Hm, there are no dogs in here!

The meaning of an utterance like (41) in normal dialog can never mean that dogs are not allowed, but rather that there are no dogs. An existential usage like in (41) can also be followed by an existential tag.

(42) (Checks room) Hm, no dogs in here! Actually, were there? / \*is it? / \*are you / \*were they?

It seems, therefore, that the ellipsis process that deletes a subject and auxiliary, can sometimes apply to existential subjects and auxiliaries as well. The major difference between the ellipsis in (41) and the ellipsis in GPs is that the ellipsis in GPs is mandatory to achieve the performative effect of an imperative (see section 4.2.1). Nevertheless, there is an ellipsis process that exists in English that is capable of deleting both the subject and the auxiliary when the deleted material is recoverable, and this ellipsis process can apply to existential subjects. In the examples in (40), the auxiliary is recoverable based on the morphology on the verb, and the subject is recoverable based on context. In GPs, the existential subject and auxiliary must be recoverable, given that the ellipsis is licensed. Though it remains a subject of inquiry what exactly licenses the ellipsis in the case of

GPs, it is worth pointing out that other imperative-like constructions can sometimes obligatorily delete material from the left-edge. In the case of fragment commands with a theme and a goal, for example, the subject is obligatorily elided.

- (43) a. Feet on the floor!
  - b. \*You feet on the floor!

Evidence from reflexive pronouns shows that fragments like these can only bind addresseeoriented reflexives, analogous to traditional imperatives. Even when binding a 2nd person reflexive, the subject cannot be pronounced.

- (44) a. Hands off yourselves!
  - b. \*Hands off myself!
  - c. \*You hands off yourselves!

The fact that the 2nd person reflexive is grammatical (44a), and a 1st person reflexive is ungrammatical (44b) suggests that the subject of these fragments is addressee-restricted in the way that traditional imperatives are. This shows that these fragments are a distinct type of construction from GPs. Despite the fact that this construction has an addressee-restricted subject, it cannot pronounce this subject overtly. Though a proper analysis of this construction is outside the scope of this paper, I highlight its unusual ellipsis pattern to indicate that ellipsis in imperative-like fragments may not follow patterns that we would expect from examining ellipsis in declaratives and interrogatives. Because of this, we should not be deterred by the unusual ellipsis process in GPs, even if the exact conditions on licensing this ellipsis are not yet understood. In Section 5, I will argue that it is LF movement of the modal "allowed" that triggers subject-auxiliary deletion.

As for the optional deletion of the main predicate, this ellipsis seems to be a general process of predicate ellipsis that exists in English. Under normal conditions of VP ellipsis, adjectival passives can be elided.

- (45) a. Smoking is allowed, and vaping is allowed too.
  - b. Tickets will be required, and ID will be required as well.

It is worth pointing out again that the conditions under which the VP is elided in GPs do not seem to be the normal conditions under which VP ellipsis apply. VP ellipsis is typically subject to a givenness constraint, that the content of the VP was previously mentioned in the discourse. GPs do not seem to be subject to any such constraint, and are felicitous even when "allowed" has not previously been mentioned in the discourse. Regardless of what licenses the ellipsis in GPs, the ellipsis clearly is licensed without requiring an antecedent that explicitly mentions "allowed."

What is unusual about the ellipsis process in GPs, therefore, is not the ellipsis itself. Both subject-auxiliary ellipsis and VP ellipsis are attested in several environments in English, and occur independently. The licensing of this ellipsis is what seems to be atypical, in the sense that it is not constrained by the typical licensing requirements on ellipsis in English (Merchant 2001). While the nature of this ellipsis is not completely understood, it is clear that neither subject-auxiliary deletion nor VP ellipsis is unique to GPs.

#### **3.2** Truth Values of General Prohibitives

One interesting property that GPs have in common with declaratives and not with imperatives is that they have accessible truth values. Imperatives are often considered to lack truth-values entirely (Han 1998; Portner 2007) or to have those truth-values rendered inaccessible through a variety of presuppositions (Kaufmann 2012; Condoravdi & Lauer 2012; Oikonomou 2016). A reply of *"That's (not) true!"* is possible with a declarative, but never with a traditional imperative.

(46) a. A: It's raining outside! B: That's (not) true!

b. A: Don't smoke in this bar! B: #That's (not) true!

GPs pattern with declaratives, and not imperatives, in allowing felicitous replies of "*That's* (*not*) *true*!"

(47) A: No smoking in this bar! B: That's (not) true!

Kaufmann (2012) discusses the "*That's* (*not*) *true*!" test at length, and describes why the failure of an utterance to be followed by "*That's* (*not*) *true*!" does not necessarily mean the utterance is non-propositional. For example, sincere promises are quite difficult to felicitously follow with "*That's* (*not*) *true*!" despite clearly being declaratives.

(48) A: I promise to be there on time. B: #That's (not) true!

The reasoning that Kaufmann (2012) utilizes is that (48) is a performative statement, and the truth values of performative statements are difficult to question. The reverse logic does not hold, however. Any utterance that can be felicitously followed by "*That's (not) true!*" must contain some truth value.

This is particularly curious with respect to GPs. GPs seem to have both the propositional meaning component of a declarative, which can be targeted by "*That's (not) true!*", and a performative meaning component which cannot. Thus, the interpretation that B's reply in (47) receives is that A was mistaken about there being a rule prohibiting smoking in the bar. There is no possible interpretation questioning the speaker's desires. Follow-ups invoking speaker desire are therefore infelicitous (49b).

(49) a. A: No smoking in this bar! B: That's not true, they changed the rule!

b. A: No smoking in this bar! B: #That's not true, you don't mean that!

There are therefore two meaning components to a GP. The propositional meaning component of a GP like the one uttered in (47) is equivalent to "There is no smoking allowed in this bar." This proposition can be targeted by a follow-up of "*That's (not) true!*" There is also a performative meaning component, more analogous to the one in imperatives, which cannot be questioned. Section 4.2 will discuss performativity at length, as GPs are more like imperatives concerning this property. Section 5.2 will discuss how to assign a dual speech-act type to a single utterance, in this case, *assert* and *request* simultaneously.

If GPs were equivalent to imperatives, then they would never be felicitously followed with *"That's (not) true!"* This leads to the conclusion that an analysis with GPs being covert members of imperative-clause type is on the wrong track. Nevertheless, we will see in the next section that GPs do share many properties with imperatives. This combination of properties will ultimately inform the analysis of an imperative operator combined with a syntactically declarative clause.

## 3.3 General Prohibitive Morphosyntax

In this section, I have shown that the subject of GPs cannot possibly be addressee-restricted in the way that traditional imperatives are, and are best analyzed as having a covert existential subject. GPs also have accessible truth values, despite being performative. Given that this construction does not act like an imperative, and could not plausibly be interrogative, it seems that it patterns best with declaratives morphosyntactically.

## 4 The Semantic/Pragmatic Update of General Prohibitives

This section will focus on the semantic and pragmatic update provided by GPs. The conclusion will be that GPs pattern with imperative clauses in most relevant respects related to their semantic/pragmatic update.

## 4.1 Identical Range of Uses

Imperatives are well-known to participate in a range of uses outside of their canonical use as commands (Schmerling 1982; Davies 1986; Kaufmann 2012; Condoravdi & Lauer 2012). This range of uses has been dubbed the *problem of quantificational inhomogeneity* by Kaufmann (2012), because some of the imperative uses seem to be related to necessity, whereas others seem to be related to possibility. Any semantic denotation of imperatives, therefore, needs to be flexible enough to capture this range of uses. As Schmerling (1982) observes, English imperatives can be used as at least wishes, permissions, and advice, in addition to their canonical usage as commands.

- (50) a. Get out of my sight! (Command)
  - b. Take a cookie, if you like. (Permission / Concession)
  - c. Please don't rain tomorrow! (Wish)
  - d. Take two in the morning and one before bed. (Advice)

Some of these uses (such as command) seem broadly related to necessity, and others (such as permission) seem broadly related to possibility. Thus, reasonable paraphrases of (50a) and (50b) could be given with the following necessity and possibility modals respectively.

- (51) a. You <u>must</u> get out of my sight!
  - b. You <u>can</u> take a cookie, if you like.

This range of uses related to possibility and necessity has informed theories of imperative denotata greatly (see Kaufmann 2012 and Condoravdi & Lauer 2012 for extensive discussion). This range of uses is notable for being relatively robust cross-linguistically, and indeed is often used for diagnosing whether or not a construction is an imperative. Of note is that an identical range of uses is available to both imperatives and GPs.<sup>18</sup>

- (52) a. No smoking in the pool room! (Command / Warning)
  - b. Fine, no washing your hands before dinner then. (Permission / Concession)
  - c. Please no raining tomorrow! (Wish)
  - d. No rubbing the infected area. (Advice)

Assuming "general prohibitive" indicates a grammatical form, rather than a specific force, all of the above in (52) are general prohibitives. There is a good deal of debate in the semantic literature on imperatives as to the best way to capture this range of uses, which seems relatively consistent across languages (see Kaufmann 2012; Portner 2007; Condoravdi & Lauer 2012; Oikonomou 2016 for some recent analyses). Regardless of which theory one supports, the similarity in range of uses between imperatives and GPs is striking, and the "*problem of quantificational inhomogeneity*" applies to both.

Given that this unusual range of uses is shared by both constructions, the simplest explanation is that both constructions derive their meaning from the same source. In this paper, I will utilize an imperative operator in the structure of GPs, analogous to the type of operator argued to exist in imperative clauses by Kaufmann (2012); Condoravdi & Lauer (2012); Keshet & Medeiros (2019).

#### 4.2 Performativity

Another argument in favor of a uniform semantic treatment for both imperatives and GPs is that both utterances are performative in identical ways.<sup>19</sup> The sense in which I describe both traditional

- (1) A: Remember to wash your hands before dinner!
  - B: I don't need to, they aren't dirty!
  - A: Fine no washing your hands then, see if I care when you get sick!

An anonymous reviewer points out, however, that "allowed" seems significantly degraded in this environment.

(2) ??Fine no washing your hands allowed then...

Kaufmann (2012) and Oikonomou (2016) argue that the imperative operator is underlyingly an existential operator, which is exhaustified to derive universal readings (= the only possibility is X). What could be happening here, therefore, is that "allowed" forces exhaustification of the imperative operator to be interpreted as universal, barring permission/concession readings. See Kaufmann (2012) and Oikonomou (2016) for extensive discussion on exhaustification of the imperative operator.

<sup>19</sup>By "performative" here, I do not mean to implicate the "performative hypothesis" of imperatives, espoused originally by Ross (1967), in which imperatives were argued to be strings like "I order you to X" underlyingly. The

<sup>&</sup>lt;sup>18</sup>There seems to be some speaker variation in the acceptability of *concession* GPs (52b). The intended context for an utterance like (52b) is something like the following.

imperatives and GPs as "performative" is that they do more than simply describe the state of the world, but serve in some way to actively change it. A hallmark property of performative utterances in imperatives is that the speaker must be committed to the addressee acting upon the content of the performative. What we can see below is that both imperatives and GPs are equally infelicitous with follow-ups that deny speaker commitment.

- (53) a. #Don't enter into my office! Though, I don't care if you enter.
  - b. #No jumping on the sofa! Though, I don't care if you jump on it.

Kaufmann (2012) argues that imperatives are obligatorily performative because there is a series of presuppositions that must hold for imperatives to be felicitously uttered. One presupposition that she argues for is that imperatives are required to be not entirely contained in the past. This causes past-oriented temporal modifiers to fail, but present and future tense modifiers to succeed. This effect is identical for both traditional imperatives and GPs.

- (54) a. #No parking last year!
  - b. No parking right now!
  - c. No parking next week!
- (55) a. #Don't park last year!
  - b. Don't park right now!
  - c. Don't park next week!

Performative utterances are obligatorily contained at least partially in the non-past because addressees are unable to influence past events. Because imperatives and GPs are performative, they are incompatible with past tense modifiers like "last year." Thus, both GPs and traditional imperatives are performative in an identical way.

It is worth pointing out that the temporal parameter for imperatives has been argued by Kaufmann (2012) to not be entirely non-past, because imperatives can actually involve evaluation of times before the utterance time. Take the following example from Kaufmann (2012).

(56) Don't call Cécile more than three times while she is in Greece. (Ch. 3, pg. 97)

If imperatives were obligatorily evaluated for non-past from the time of the utterance, then (56) could only mean that the addressee should not call Cécile three times after the utterance of the imperative. It does not get this interpretation, however, and in the event that the addressee has already called Cécile twice while she is in Greece, then the addressee is only allowed one more call. The parameter for temporal evaluation is identical for GPs; the event must not be entirely contained in the past, but can evaluate times before the utterance time.

(57) No calling Cécile more than three times while she is in Greece.

imperative performativity I discuss here is not performative in this sense.

The fact that imperatives and GPs act identically with respect to temporal evaluation strongly suggests that they are evaluated with respect to the same parameters. I take this as additional evidence that whatever is responsible for the semantic/pragmatic update in imperatives is also present in GPs. A presupposition like the non-past temporal parameter is therefore present in both constructions.

Also related to performativity is the possibility of embedding either construction. Traditional imperatives are well known to be difficult to embed cross-linguistically (Kaufmann 2012). Han (1998) argues convincingly that the restrictions on embedding imperatives are related to the performativity of the semantic object they represent.<sup>20</sup> GPs pattern with traditional imperatives in being unembeddable, at least in English.

- (58) a. \*Sosthene requested (that) stop!
  - b. \*I implored Alyssa (that) finish her meal!
- (59) a. \*Sosthene requested (that) no dogs here!
  - b. \*I implored Alyssa (that) no more pigs!

Performative utterances in general are well-known to be difficult to embed, presumably due to the pragmatic update that they provide being associated with main clauses rather than subordinate clauses. Despite this strong tendency, there appears to be an environment, even in English, where imperatives are capable of being embedded. Crnič & Trinh (2009) argue convincingly that imperatives can be truly embedded in English under exactly one verb, "to say." Both GPs and traditional imperatives are embeddable under "say."

- (60) a. Mom said no jumping on the couch!
  - b. Mom said don't leave yet!

The mechanics of how imperatives are embedded, and why this embedding appears to be limited to a single verb, are beyond the scope of this paper. The point is simply that GPs and traditional imperatives pattern identically concerning their embedding possibilities. Given that the restrictions on embedding traditional imperatives have been argued to be derived from the performative object they represent, the similarity in embedding patterns suggests that both GPs and traditional imperatives represent a similar, performative semantic object.

#### 4.2.1 Differences with Tensed Declaratives

Given that "allowed" is optional in GPs, there is a close similarity between a GP like in (61a) and tensed statements of prohibition like in (61b) and (61c).

(61) a. No jumping allowed on the sofa!

<sup>&</sup>lt;sup>20</sup>It is currently an open question whether or not the restrictions that forbid imperatives from appearing in embedded positions are based on syntax or semantics. See Rivero & Terzi (1995) for arguments that the restrictions on embedding imperatives are syntactic in nature. Regardless of the source of the restriction, GPs act more like imperatives than declaratives with respect to embedding.

- b. No jumping is allowed on the sofa.
- c. There is no jumping allowed on the sofa.

The superficial difference between the two seems to be the pronunciation of a verb ("is"). Despite (61a), (61b) and (61c) being truth-conditionally equivalent (as far I can tell), the utterances differ in their performativity related to the expression of tense marking. The verbless one is performative, whereas the version with a tensed verb is not.

- (62) a. #No jumping allowed on the sofa, but I don't care if you jump on it.
  - b. No jumping on the sofa is allowed, but I don't care if you jump on it.
  - c. There is no jumping allowed on the sofa, but I don't care if you jump on it.

What this shows is that there is a link between lacking a main verb and the performativity of the utterance. More specifically, it seems that this construction has a co-occurrence restriction between expressing  $T^0$  overtly, and the type of performativity typically associated with imperative clause type. Platzack & Rosengren (1997) argue that the bare form of the verb surfaces in imperatives in English because the syntactic structure of imperatives is impoverished and cannot license tense. Potsdam (2007) argues that the fact that English allows null subjects in imperatives is related to the fact that they lack an overt tense projection. Zanuttini et al. (2012) argue that the addressee restriction on imperatives is derived from T having irregular features in imperative (or jussive) clauses.

The nature of the relationship between overt tense marking and imperative-ness is beyond the scope of this paper. However, it seems clear that whatever provides the performative meaning component of imperatives is incompatible with overtly expressed tense marking, even if the morphosyntax of that utterance is a declarative.<sup>21</sup>

## 5 Analysis

This amalgamation of facts leads to a curious conclusion. Morphosyntactically, GPs pattern with declarative clauses with an existential subject and "no X allowed" as their predicate. The semantic and pragmatic update of GPs seems nearly identical to imperatives. Rather than favoring either the declarative or imperative properties as more basic, I will argue in this section that GPs are a combination of an imperative operator and a declarative clause with an existential subject. Thus,

- (1) a. \*No smoking be allowed!
  - b. \*There be no smoking allowed!

Given that 'be' in imperatives triggers do-support and has been argued not to move (Potsdam 2017), we might expect such an utterance to be possible. It seems the true generalization for GPs might be then that no verb is possible at all, anywhere in the structure.

<sup>&</sup>lt;sup>21</sup>An untensed verb is also impossible in GPs.

the speech acts of ASSERT and REQUEST are achieved, in the sense of Asher & Lascarides (2001).<sup>22</sup> To my knowledge, this is the first time that a conventionalized expression has been argued to achieve the effect of combining both ASSERT and REQUEST in the generative linguistics literature, as it is typically assumed that imperative operators can only combine with syntactically imperative clauses. Following Rivero & Terzi (1995) and Han (1998), I place the imperative operator on C<sup>0</sup>. In choosing to place an operator in the syntax, I am siding with the modal operator view of the semantics of imperatives argued for by Han (1998); Kaufmann (2012); Oikonomou (2016); Condoravdi & Lauer (2012) and against the non-operator approach argued for by Portner (2004, 2007).<sup>23</sup> I will also follow Keshet & Medeiros (2019) and assume that OP<sub>*IMP*</sub> merely selects for a lower ModP, rather than providing modality itself. In this case, the ModP is fulfilled by the modal "allowed," which moves to Mod<sup>0</sup> at LF to fulfill the requirement that ModP contains a modal element. NegP will be filled by a negative operator in the case that the GP contains "only." TP selects PassP, because this construction is fixed in the passive, and "no smoking" originates as the object of "allow" and moves to Spec-VoiceP. Below is the complete derivation for the GP "No smoking!"

<sup>&</sup>lt;sup>22</sup>Asher & Lascarides (2001) uses the term *request*, and I will follow that here. Of course, as this paper has already shown, the speech act *request* is too broad to accurately describe the uses available to either imperatives or general prohibitives.

<sup>&</sup>lt;sup>23</sup>As far I can tell, Portner's account could be modified to allow a single utterance to update multiple storage sites. If GPs were allowed to update both the *Common Ground* and the *To-Do List* simultaneously, the correct semantic/pragmatic update could be derived. Portner, however, rules this type of update out explicitly by arguing for *closed* clause-type systems.



The imperative operator in (63) is the identical operator that is seen in traditional imperatives, consolidating both GPs and traditional imperatives under the same operator. Using the imperative operator in both traditional imperatives and GPs causes the meaning of both constructions to be derived from a single source. Given the identical range of uses, this is a desirable result.

Allowing an imperative operator to combine with a declarative clause like in (63) above violates assumptions that are typically made about the need for imperative operators in the first place. If we were to assume that the imperative operator is equivalent to a clause-typing mechanism that forces its complement to have all imperative properties, then it should not be able to combine with the TP in (63). However, recent work (Oikonomou 2016; Keshet & Medeiros 2019) has separated the modal contribution of imperatives from the operator itself. If we follow the conclusions presented in this work, and an imperative operator provides only a series of presuppositions, then it is reasonable that the operator does not determine that the clause it combines with is morphosyntactically imperative. Of course, this operator will still appear in morphological imperatives, but it may appear with other constructions as well. If this is the case, a declarative clause and the imperative operator can co-occur. I will argue in this section that the operator in (63) is purely presuppositional, and that the modal contribution necessary for imperatives is provided by "allowed."

#### 5.1 Semantics of the Imperative Operator

There is a long-standing debate in the literature on imperatives as to whether or not they are best represented with a modal operator. In a recent work, Oikonomou (2016) argues that the only way to make sense of focus interactions in Greek is if a covert modal is present in the syntax. Based on examples like those shown below, and given that overt movement resolves scopal ambiguities in Greek (Tsimpli 1995), she argues that the word "only," as well as other quantifiers, can scope over the imperative operator. Additionally, they must take scope over the imperative operator if a phrase containing "only" is moved to the left periphery.

Context A: You've asked me to paint those Context B: Oh, I feel like doing something tables but I'm really tired and don't feel like really useful today. I think I'll paint the tables doing something really useful today.

over there.

- (64)a. Vapse [mono to strogilo trapezi]. the round table. Paint only  $\rightarrow$  OK in Context A:  $\Diamond$  > only  $\rightarrow$  OK in Context B: only  $> \Diamond$ 
  - b. [mono to strogilo trapezi] vapse. Only the round table paint.  $\rightarrow$  Bad in Context A: \* $\Diamond$  > only  $\rightarrow$  OK in Context B: only  $> \Diamond$

(Oikonomou 2016, p.41)

(64a) is the default word order for imperatives in Greek, where the imperativized verb is initial in the clause. When this is the word order, the meaning of the expression is ambiguous between a reading in which the addressee is permitted to only paint the round table ( $\diamond$  > only; other tables are permitted) and a reading in which the addressee is only permitted to paint the round table (only  $> \Diamond$ ; other tables are not permitted). In the case of the (only  $> \Diamond$ ) reading, Oikonomou (2016) argues that the quantifier scopes over the imperative operator. When the quantified phrase moves overtly to focus position, as in (64b), the interpretation where the addressee is permitted to only paint the round table is removed. The sole reading available is one in which the quantifier scopes over the permission, and the reading is that the addressee can only paint the round table.

Oikonomou (2016) takes this as strong evidence in favor of the existence of an operator in the syntax, and I can see no serious argument against it. Given that it seems we need an operator in the syntax of imperatives to explain scopal interactions more generally, it makes sense to use an operator in the structure of GPs as well. The operator I will use herein is a simplified version of the operator argued for by Kaufmann (2012) and Keshet & Medeiros (2019). For Kaufmann, the operator provides the semantics of a priority modal, and triggers a set of presuppositions that constrain the distribution of imperatives. The operator below is the operator used by Kaufmann (2012). f stands for the modal base, and g for the ordering source, of Kratzer (1981).

- (65)  $[\![OP_{IMP} f g ]\!]^w = 1$ , when defined, iff every best world w' that both speaker and addressee jointly hold possible, as ordered by g(w), is such that p(w') = 1.  $[\![OP_{IMP} f g ]\!]$  is defined when the following presuppositions are met:
  - a. Non-past constraint The time at which p takes place must not be entirely in the past. (Kaufmann 2012:Sect. 3.2.2)
  - b. Authority condition The speaker must be in a privileged position with respect to the truth of  $[OP_{IMP} f g]$ , either as an authority figure or as a knowledgeable expert. (Kaufmann 2012:Section 4.2.2)
  - c. Epistemic uncertainty constraint It is unknown whether p(w) is true or false before the imperative is uttered. (Kaufmann 2012:Section 4.2.3)
  - d. Ordering Source Restriction The imperative must address a salient decision problem  $\overline{D}$ , and the speaker and addressee must consider g to be the relevant ordering source for resolving D. (Kaufmann 2012:Section 4.2.3)

Keshet & Medeiros (2019) argue that the imperative operator only provides these presuppositions (a-d), and that the operator selects a priority modal which provides the non-presuppositional meaning. I will follow that here, and assume a projection, ModP, that accounts for the modality associated with imperatives. The necessity associated with imperatives, therefore, comes from a covert priority modal, and not from the imperative operator itself. Crucially, the only requirement is that Mod<sup>0</sup> has some modal element in it, but this modal can vary across constructions.

Under this conception, when the imperative operator selects a priority modal, the meaning is essentially equivalent to "*should/must*," but with the additional presuppositions that the operator provides.

(66) a.  $OP_{IMP} [MOD_{priority} f g]$  [Leave!] b. Leave!  $\approx$  You should leave!

In the case of traditional imperatives, the agent of the proposition p is always the addressee, due to a syntactic restriction on imperative clauses. In addition, the modal that IMP will select will always be  $MOD_{priority}$  in the case of traditional imperatives. I propose that the requirement to have  $Mod^0$  filled by a modal element can be fulfilled in the case of GPs by "allowed." In order for "allowed" to be in  $Mod^0$ , it must move at LF to occupy the head of the modal projection.

(67) a.  $OP_{IMP}$  [ModP allowed fg] [There is no smoking allowed!]

The performative force of an imperative is provided by the imperative operator, which is present in both traditional imperatives and GPs. In traditional imperatives, the operator selects for a covert priority modal.<sup>24</sup> In GPs, this modal is "allowed," which is clearly a modal expression and therefore

<sup>&</sup>lt;sup>24</sup>An anonymous reviewer brings up the following interesting pair of examples.

<sup>(1)</sup> Don't be allowed to smoke in here!  $\neq$  Don't smoke in here!

The fact that these sentences are not equivalent leads me to believe that IMP will always select a covert priority modal, unless it is in an IaD or a GP.

eligible to fulfill the requirement that ModP is occupied by a modal element. This follows the analysis in Keshet & Medeiros (2019) that IMP can select for a lower modal, and does not carry the modality itself. Therefore, the difference between the modality of traditional imperatives and GPs is simply in whether or not their modal can be explicitly expressed. In the case of traditional imperatives, the modal must remain covert. In English, the modal "allowed" can optionally be pronounced.

In (67), the modal base f will always be set to something like "what the rules allow" or 'what society allows." This is because the modal "allowed" is present explicitly in the structure of GPs. The ordering source g will be set to the worlds that both the speaker and addressee prefer.<sup>25</sup>

The meaning derived in (67) appears to wrong, however. The meaning that (67) provides is something like "It is allowed to not smoke." This is because the modal element "allowed" moves at LF to Mod<sup>0</sup>, but negation remains low inside the TP. The correct interpretation, therefore, can only be derived by negation taking scope over the modal "allowed." I propose that there is a projection that is intermediate between C<sup>0</sup> and Mod<sup>0</sup>, that hosts a negation operator (OP¬) in the case of "no" GPs.<sup>26</sup>

(68)  $OP_{IMP}$  [NegP OP¬ [ModP allowed fg] [There is no smoking allowed!]

Note that negation is only interpreted once in (68). Thus, negation must take wide scope in GPs, over the modal "allowed." The ability of "no" to take wide scope regardless of its syntactic position has been noted before (Potts 2000). In GPs, the existence of negation dominating ModP is necessary, negation must always scope over "allowed" in GPs.

As for "only" GPs, I propose that the situation is analogous, but instead of a negative operator scoping over "allowed," it is an exhaustivity operator.

(69)  $OP_{IMP}$  [NegP  $OP_{exh}$  [ ModP allowed fg] [There are only dolphins allowed!]

The meaning that is derived from (69), therefore, is that the only thing that is allowed is dolphins. The exhaustivity operator generates a set of focus alternatives (in this case other animals), and negates each of them, thus giving a precise answer to the question of what is allowed.

#### 5.2 Imperative Operator Presuppositions

The account of the imperative operator presented in the previous subsection contains a set of presuppositions to ensure that the update from a felicitous imperative is sufficiently performative. Following Keshet & Medeiros (2019), I argue that these presuppositions are the only meaning that the operator provides.

Imperatives lack the reportative uses that modalized declaratives possess. To account for this, Keshet & Medeiros (2019) propose the following four presuppositions, following Kaufmann (2012), that must be true in order for imperatives to be felicitously uttered.

<sup>&</sup>lt;sup>25</sup>See Kaufmann (2012) for an analysis of *wishes*, which may involve only a *speaker-bouletic* ordering source.

<sup>&</sup>lt;sup>26</sup>Han (1998) argues convincingly that negation can never scope over the imperative operator, hence this projection must be below  $OP_{IMP}$ .

- (70) Non-past constraint The time at which p takes place must not be entirely in the past. (Kaufmann 2012:Sect. 3.2.2)
- (71) Authority condition The speaker must be in a privileged position with respect to the truth of  $[OP_{IMP} f g]$ , either as an authority figure or as a knowledgeable expert. (Kaufmann 2012:Section 4.2.2)
- (72) Epistemic uncertainty constraint It is unknown whether p(w) is true or false before the imperative is uttered. (Kaufmann 2012:Section 4.2.3)
- (73) Ordering Source Restriction The imperative must address a salient decision problem D, and the speaker and addressee must consider g to be the relevant ordering source for resolving D. (Kaufmann 2012:Section 4.2.3)

I will address each of these presuppositions in turn, and show that they are present in the derivation of GPs. This shows that the meaning of GPs and traditional imperatives is best described as deriving from the same source.

#### 5.2.1 Non-past constraint

As was already shown in Section 4.2, both GPs and imperatives involve evaluation over an identical temporal parameter. Kaufmann (2012) argues that imperatives are not compatible with times contained entirely in the past. The effect is identical between GPs and imperatives.

- (74) a. #No parking last year!
  - b. No parking right now!
  - c. No calling Cécile more than three times while she is in Greece.

#### 5.2.2 Authority Condition

The authority condition is proposed by Kaufmann (2012) to ensure that the speaker is in an epistemically privileged position with regards to the at-issue content of imperatives. In essence, the authority condition ensures that the speaker cannot be mistaken about their own desires, nor can they fail to be an authority about the propositional content of the imperative they endorse. Thus, sequences like the following (75) are infelicitous.

(75) #I don't know how to get to Harlem, but take the A-Train! (from Keshet & Medeiros 2019;p896)

(75) is infelicitous because it expresses two incompatible states of affairs. The imperative presupposes that the speaker is an authority in answering how to get to Harlem, but the speaker explicitly denies that they are an expert in the prejacent.

GPs involve authority in the same way as traditional imperatives. Thus, an utterance like (76) is infelicitous for the same reasons as the imperative in (75).

(76) #I have no idea what the rules are, but no smoking allowed here!

The speaker denies that they are an expert on the status of the rules in the prejacent, and then goes on the utter a GP about the status of the rules. This sequence is incoherent, and the result is infelicity. What this shows is that Epistemic Authority holds in both traditional imperatives and GPs.

#### 5.2.3 Ordering Source Restriction

The ordering source restriction constraint is meant to restrict felicitous imperatives to contexts in which both the speaker and addressee agree that the content of the imperative constitutes a reasonable answer to a salient decision problem D, and that both speaker and addressee must consider g to be a relevant ordering source for resolving D.

In essence, the Ordering Source Restriction ensures that the speaker and addressee are committed to believing that p constitutes a possible answer to the best course of events. Thus, sequences like (77) are infelicitous.

(77) Call Melli! #But I don't want you to call her. (Kaufmann 2012: pg158)

A similar effect is derived for GPs, where the speaker must endorse the content of the rule being followed.

(78) a. #No jumping on the sofa, but I don't care if you do.

b. #No jumping on the sofa, but I want you to jump on it.

In the case of GPs, the relevant *decision problem* is often something do to with what the best course of action is, given that there are rules. Thus, we can imagine the following sequence.

(79) No smoking in the bar! (when addressee is smoking in the bar)

In the case of an utterance like (79), the salient decision problem (in this case, whether or not anyone smokes in the bar) is given a decisive answer by the bar owner. If the GP is successful, the addressee will add the information that smoking is not allowed in the bar to their knowledge. Presumably, this will have an effect on the addressee's future behavior, which was the purpose of the speaker's utterance in the first place.

#### 5.2.4 Epistemic Uncertainty

The EPISTEMIC UNCERTAINTY constraint is meant to explain why imperatives are infelicitous in environments where the addressee has no control over making the outcome of the imperative become true, or when the outcome of the imperative is inevitable regardless of the actions of the addressee. The following example shows the incompatibility of imperatives with situations where the outcome is perceived by the speaker to be inevitable.

(80) #I know you will do this no matter what, so do it also. (adapted from Kaufmann (2012))

The argument in this instance is that because the speaker is certain that the addressee will do the action, it is infelicitous to command the addressee to complete the action.

It is unclear to me whether all instances of imperatives are subject to epistemic uncertainty, however. Imperatives can be used as *exhortations*, in which the speaker has no reasonable expectation that both  $[\![\phi]\!]^c$  and  $[\![\neg\phi]\!]^c$  are possible. Imagine the following scenario, where the speaker is watching a horse race, and watching a jockey who never falls off his horse.

(81) (watching the jockey turn the corner) Yeah! Ride that horse!

In this case, it doesn't seem to be a requirement that the speaker believes both riding the horse and not riding the horse are possible in order to utter (81). Following Condoravdi & Lauer (2012), it seems the speaker merely expresses a preference for the addressee's continued riding of the horse. In cases where the continued riding is inevitable, this comes across as an exhortation.

Regardless, the EPISTEMIC UNCERTAINTY constraint is typically argued for or assumed in analyses of imperatives (Kaufmann 2012; Condoravdi & Lauer 2012; Oikonomou 2016; Keshet & Medeiros 2019). The formulation, as described above, will not work for the case of GPs. If we try to apply Epistemic Uncertainty to a GP, we get the incorrect meaning.

(82) No smoking allowed!  $\neq$  Speaker believes that both "There is no smoking allowed" and "There is smoking allowed" to be possible.

This is essentially the exact opposite of the meaning that GPs provide. As we have already seen, the truth value of GPs projects outside of the performative content of the utterance. Therefore, GPs can only be uttered in contexts where the speaker is certain about the existence of a rule. If the speaker is uncertain about the status of a rule, GPs are infelicitous.

(83) #No parking downtown! (when speaker has no knowledge about the rules)

I have already argued that the modal "allowed" is in fact the modal that the imperative operator selects for in GPs, and moves at LF to a higher projection, ModP. If this is the case, it is plausible that the modal content of GPs is outside the domain of epistemic uncertainty. The covert modal that is selected for by IMP in traditional imperative clauses is outside the domain for epistemic uncertainty.

(84) [  $OP_{IMP}$  f g ] [ModP ] Leave!  $\rightarrow$  You should leave! Speaker is uncertain about whether A will or will not leave. NOT: Speaker is uncertain about whether A should or should not leave.

Epistemic Uncertainty seems to apply only to the proposition embedded under ModP in (84). The case with GPs is analogous if we omit the modal "allowed" from the lower clause. This is achieved by LF movement of the modal to ModP.<sup>27</sup>

<sup>&</sup>lt;sup>27</sup>Note that given the nature of Epistemic Uncertainty's evaluation of  $[\![\phi]\!]^c$  and  $[\![\neg\phi]\!]^c$ , it is irrelevant whether or not negation moves out of the lower clause in this instance.

(85) [  $OP_{IMP}$  f g ] [ModP allowed ] No smoking!  $\rightarrow$  There should be no smoking allowed! Speaker is uncertain about whether there will or will not be smoking. NOT: Speaker is uncertain about whether smoking will or will not be allowed.

Therefore, although at first glance imperatives and GPs seem to act differently with respect to epistemic uncertainty, both involve analogous processes, where the modal element that is selected for by IMP is placed in ModP, and is not available for evaluation by the Epistemic Uncertainty Constraint.

Another possibility, that is not mutually exclusive with LF movement of "allowed" presented directly above, is that Epistemic Uncertainty may be more abstract than was previously thought. Following the previous subsection about the *Ordering Source Restriction*, it is possible that Epistemic Uncertainty simply refers to the resolution of the addressee's action with respect to the salient decision problem *D*. That is to say, when an imperative or GP  $\phi$  is uttered, it is felicitous only to the extent that it elucidates in some way the best course of action for the addressee moving forward. Epistemic Uncertainty, then, may not take the literal propositional content of the imperative, as it is often conceived, but rather is just a pragmatic constraint on the speaker's uncertainty about the addressee's action relative to solving the decision problem *D*. When an addressee's actions are certain, the imperative operator is infelicitous. I will leave open which possibility is correct here, but in any case, GPs are compatible with Epistemic Uncertainty.

## **5.3** Accounting for the Dual Speech-Act of General Prohibitives

In this subsection, I will show that it is actually expected that GPs would have accessible truth values, and that the imperative operator does not block accessibility to truth conditions.

## 5.3.1 Truth Values of Imperative Constructions

To this point, I have shown that it is plausible that the imperative operator could be attached to GPs. There is still the matter of the propositional content provided by GPs, however. GPs provide a propositional meaning component that is targetable by follow-ups mentioning truth and falsity. GPs have the same operator as imperatives, yet they provide descriptive information about the world. That descriptive information is unaffected by the performativity of the utterance, and seems to act like a normal declarative.

(86) No smoking allowed in Dayton after 10 P.M.!  $\rightarrow$  There is no smoking allowed in Dayton after 10 P.M.!

 $\rightarrow$  There is a rule such that smoking is not allowed in Dayton after 10 P.M.

When the operator takes a declarative proposition as in (86), the interpretation is that the speaker prefers the existence of the rule, and asserts that the rule exists simultaneously. This assertion component of GPs is not present in traditional imperatives, which never have accessible truth values.

Kaufmann (2012) originally proposed that the series of presuppositions associated with the imperative operator block access to truth values of imperatives. These presuppositions are present in GPs (Section 5.2), yet the truth value of GPs remains accessible. This means that it cannot be that the presuppositions are what blocks the accessibility of truth values. Keshet & Medeiros (2019) argue that in the case of Imperative and Declarative Conjunctions (IaDs), the imperative operator selects for a future-oriented modal rather than a priority modal. Their analysis of IaD conjunctions can be seen below in (87).

(87) IMP MOD<sub>future</sub> [Take the A Train, and you'll be there after dark.]

(Keshet & Medeiros 2019; their 78)

What is notable about IaD conjunctions like in (87) is that have accessible truth-values that are analogous to normal conditionals. Follow-ups to truth and falsity can target the declarative portion of an IaD.

(88)	a.	A: Take the A Train, and you'll be there after dark.	(IaD)
		B: That's not true, I'll never get there taking the A train!	
	b.	A: If you take the A train, you'll be there after dark.	(Conditional)
		B: That's not true, I'll never get there taking the A train!	

What this shows is that the existence of the imperative operator does not guarantee that truth values will be inaccessible in the clause that it selects. IaDs have identical truth values to their conditional paraphrases, but involve an imperative operator nonetheless. If this is the case, it shows that there is no relationship between having accessible truth values and the existence of the imperative operator.

What then, blocks the truth values of traditional imperatives? I propose that it is the covert priority modal that the imperative operator selects in traditional imperatives that blocks accessible truth-values. The imperative operator comes with a restriction that it must combine with a modal. In the case of GPs, it combines with the modal "allowed." In the case of IaDs, it combines with a covert future-oriented modal. Neither "allowed" nor the future modal block truth conditions. Thus, it is only in the case of traditional imperatives, with a covert priority modal, that truth values are inaccessible.

(89)	a.	OP <sub><i>IMP</i></sub> [ModP allowed ][TP There is no smoking!]	(TVs accessible)
	b.	$OP_{IMP}$ [ModP MOD <sub>future</sub> ][TP Take the A train, and you'll be the	re after dark.]
			(TVs accessible)
	c.	OP <sub>IMP</sub> [ModP MOD <sub>priority</sub> ][TP Paint these walls!]	(TVs inaccessible)
	1		

Under this conception of the operator, the operator will select for a covert priority modal in the case of traditional imperatives, and this priority modal blocks accessibility to truth and falsity. Because IaDs and GPs do not have a covert priority modal, their truth values are accessible. Exactly what the relationship is between these specific modals and follow-ups regarding truth and falsity is not clear at present, but it should be clear that the behavior of GPs having accessible truth values is not necessarily as unusual as it might first seem.

#### 5.3.2 Concatenating Multiple Speech-Acts

The analysis presented herein therefore argues that a single utterance can have multiple speech acts associated with it. The declarative TP provides the speech act of *asserting*, and the imperative operator provides the speech act of *requesting*. To my knowledge, the only system that takes seriously the possibility of combining multiple speech acts in this manner is Segmented Discourse Representation Theory (SDRT; Asher 2012; Lascarides & Asher 1993; Asher & Lascarides 2001). Asher & Lascarides (2001) spell out an analysis of conventionalized indirect speech acts, such as the well-known example of questions being used as requests.

#### (90) Can you pass the salt?

(90) has the form of an interrogative, but its typical use in conversation is to make a request. Asher & Lascarides (2001) argue that the request usage of "can" in this sense is conventionalized in English, and that an utterance like (90) is assigned a complex semantic type of *question*•*request* by the grammar.<sup>28</sup> The essential idea is that complex types such as *question*•*request* can combine objects like *question* and *request* that have conflicting types on their own, and those complex types can combine the properties of each individual sub-type.

Asher (2000); Asher & Lascarides (2001) discuss an example where an assertion can be interpreted as a request, via standard Gricean reasoning.

#### (91) I'm out of gas.

Grice (1975) famously lays out the *cooperative principle*, a theory of pragmatics and pragmatic enrichment. Following standard Gricean reasoning, when a speaker utters (91), they are asserting that they are out of gas. Using pragmatic inference, the addressee can infer that, under normal circumstances, being out of gas is undesirable. This leads the addressee to the conclusion that the reason for A's utterance was their desire to get out of this situation. Therefore, a request is generated such that the addressee has been requested to get the speaker out of this state (i.e., by giving him some gas, etc.).

Given the right contextual considerations, Asher & Lascarides (2001) assign an utterance like (91) a speech-act type of *assert*•*request*. That is to say, the grammar can assign a single utterance multiple conflicting speech-act types simultaneously in this system. The reasoning that leads to the assignment of the speech-act type *assert*•*request* utilizes Gricean principles of cooperation and rationality. Therefore, a speaker who utters (91) can provide a speech-act of both *assert* and *request* at the same time, with the same utterance.

I propose that GPs receive the same speech-act type as (91). That is, an utterance like "No smoking!" receives the dual speech-act type of *assert*•*request*, where the GP asserts the content that smoking is not allowed, and requests the addressee to act in accordance with this information. Therefore, when a speaker produces an utterance like (92) below, they are producing two speech acts simultaneously.

<sup>&</sup>lt;sup>28</sup>See Asher & Lascarides (2001) for a full explanation of this system, in particular the dot operator that concatenates speech-act types.

(92) No jumping on the sofa!

However, while (91) receives its dual speech-act type via Gricean inference, GPs receive their dual speech-act type via conventionalization. That is to say, no Gricean reasoning is necessary for an utterance like (92) to receive dual speech-act force. Under this conception, GPs are conventionalized in the grammar of English speakers as possessing a dual speech-act type, similar to proposals about the conventionalization of "can" for (90).

#### 5.3.3 Putting the Pieces Together

In the previous subsections, I argued that the imperative operator, as conceived by Keshet & Medeiros (2019), is sufficient to explain both the assertion and request updates provided by GPs.

Below, in (93), is a derivation involving the dual-speech type of *assert*•*request* and the presuppositions of Kaufmann (2012) and Keshet & Medeiros (2019). It also involves LF movement of "allowed" to Mod<sup>0</sup> and a negative operator in Neg<sup>0</sup>.

- a. [OP<sub>IMP</sub>] [NegP OP¬ [ModP allowed ] [TP There is no smoking allowed!]
   ASSERT: There is no smoking allowed.
   REQUEST: Speaker endorses that there is no smoking allowed.
  - b. Presuppositions:
    - i. Non-Past Constraint: *There is no smoking allowed* must take place not entirely in the past.
    - ii. Epistemic Authority: Speaker is in a privileged position with respect to the truth of *There is no smoking allowed*.
    - iii. Ordering Source Restriction: Both Speaker and Addressee agree that *There is no smoking allowed* constitutes an answer to a salient decision problem *D*.
    - iv. Epistemic Uncertainty: Speaker believes that both *There is smoking* and  $\neg$ *There is smoking* are possible.

Follow-ups regarding truth and falsity can target the *assert* portion of the utterance, while leaving the *request* portion of the utterance fully performative. Movement of "allowed" at LF to Mod<sup>0</sup> causes the presuppositions provided by the imperative operator to derive the correct meaning. The modal "allowed" does not block truth values from being accessible with the imperative operator, only a covert priority modal blocks truth values.

Additionally, I propose that it is the movement of "allowed" to ModP that triggers ellipsis of the subject and auxiliary. Given that "allowed' must obligatorily move at LF to Mod<sup>0</sup> in GPs, the existential subject and the auxiliary will always be elided. It seems likely that there is a connection between the overt movement of a modal element to ModP, the imperative operator, and the ellipsis of the subject and auxiliary, those the specific morphosyntactic implications of this operation are not yet explained. What seems clear is that, to the extent that movement of "allowed" triggers ellipsis of the subject and auxiliary, the deletion of the subject and auxiliary is mandatory. Given that "allowed" must obligatorily be moved at LF to Mod<sup>0</sup>, it seems reasonable that the reason why

ellipsis is obligatory in this construction is because they are connected. In other constructions with subject-auxiliary deletion, there is no modal movement to ModP. In these environments, subject-auxiliary ellipsis is optional.

#### 5.4 Syntax of the Imperative Operator

It is standardly assumed in the literature on imperatives that the imperative operator restricts the person values of the clause it combines with. The restriction of imperative clauses to addressee subjects has been a topic of recent investigation (Platzack & Rosengren 1997; Potsdam 2007; Zanuttini 2008; Oikonomou 2016). The addressee restriction is nearly universally argued to be syntactic in nature, and separated from the directive force associated with imperatives. Yet, the analysis presented in the previous section argues that the imperative operator is capable of combining with propositions that do not have addressee subjects, but rather existential subjects. This does not mean that the analysis presented in this paper is at odds with previous work, however.

In a series of works, Zanuttini (2008); Zanuttini et al. (2012) develop a theory analyzing the 2nd person restriction in imperatives as being due to a head present in imperatives, the *jussive* head, which hosts 2nd person features and transmits them to the subject.



The account provided by Zanuttini, shown in (94), explains the addressee restriction on the subject by assuming that the jussive head has special properties which restrict the domain of possible subjects to those including the addressee. Crucially, the operator itself does not contain the syntactic feature, it is the jussive head. This predicts that, if the operator can appear in constructions outside of JussiveP, we would not expect an obligatory addressee subject. This is exactly what I have argued herein.

Of course, there is likely to be a very close relationship at the level of the grammar as a whole between the addressee obligation induced by the imperative operator and the addressee restriction imposed by the jussive head. This is why in the standard case of imperatives, the two appear together. I see no reason to argue against the existence of *JussiveP*, only to add the possibility of the operator appearing in other constructions.

If we allow the operator to attach to morphosyntactically declarative propositions, the syntactic and semantic/pragmatic distribution falls out. In (95) below, previously given as (63), the full structure I propose here can be seen.



Because the structure in (95) does not contain a JussiveP, there is no addressee restriction on the subject. This is desirable, given that it is implausible that "there" or "no smoking" could be the addressee. Instead, the subject of the clause is the existential "there."

It remains an open question as to why, exactly, the imperative operator can combine with TPs like the one in (95) and not others. One possibility is that the semantic object composed by " $\neg$ allowed" is compatible with the imperative operator, to the exclusion of other types of semantic objects. Given that "only" produces a negation in its set of focus alternatives, it can satisfy the semantic requirement on " $\neg$ allowed." If we assume, following Iatridou (2019), that negation forms a crucial element in forming a GP, this could be the reason why " $\neg$ allowed" can form a GP but "allowed" on its own cannot.

One possible analysis is that the imperative operator is compatible with universal modals but not existential modals. Thus, when the operator selects for ModP, this must be filled with a universal modal, and not an existential modal. Thus, negation and permission combine to form a universal modal. A permission modal like "allowed" on its own is insufficient input for the imperative operator. A move like this would amount to statements like the following counting as GPs.<sup>29</sup>

(96) Tickets required!

Restricting the operator to combining with universal modals is a tricky predicament, however, given that both Kaufmann (2012) and Oikonomou (2016) argue that the flavor of imperative modality is underlyingly *existential*, with exhaustification in the case of universal readings. One fact worth mentioning is that there seem to be other types of verbless imperative-like constructions that are limited to universal readings. Nouns can be uttered in isolation, with universal force, as in (97) below.

(97) Silence! (Command)

(97) works well as a command with universal force, but it is completely impossible with existential force.

(98) #Silence, if you like.

(99) #Silence! (Speaker is wishing for silence)

Working out a detailed analysis of these constructions is not possible in the scope of this paper, but it is worth pointing out that verbless imperatives may sometimes be restricted in ways that traditional imperatives are not. If this is the case, it may have interesting implications for the role of the verb in carrying certain parts of imperative meaning.

## 5.5 Implications for Clause Type Systems

If this analysis of an imperative operator being able to combine with a declarative proposition is on the right track, there are some important implications of our current understanding of clause type systems.

In an influential proposal, Sadock & Zwicky (1985) point out that, given a random language, there is a high likelihood of finding a three-way split between form and function like the following.

- (100) a. You caught the speckled geese. (Declarative)
  - b. Did you catch the speckled geese? (Yes-no question)
  - c. Catch the speckled geese! (Imperative) (Sadock & Zwicky 1985)

The argument is that each of these is represented by a unique morphosyntactic form, and is assigned a prototypical speech act function of ASSERT, QUESTION, COMMAND respectively. The arguments presented in this paper have argued against this line of reasoning with respect to a unique morphosyntactic form. In the account I have presented there are morphosyntactic operations, which can be triggered by operators, but they do not associate with any notion of morphosyntactic clause type. I will review a few reasons why this is actually beneficial towards our understanding of form and function, rather than being a detriment.

<sup>&</sup>lt;sup>29</sup>Thanks to an anonymous reviewer for bringing this suggestion to my attention.

The first reason is that there is not, to my knowledge, a single morphosyntactic operation in any language that corresponds exactly with one illocutionary force. Given the conception of the morphosyntax argued for in Sadock & Zwicky (1985), we might expect that there would be movement operations or agreement patterns, for example, that took place only in INTERROGATIVE environments. To my knowledge, no such operation has ever been attested.

A well-known example that has been argued to be such an instantiation is subject-auxiliary inversion in English. It is often argued that we need a [+interrogative] feature of some type in the syntax to derive subject-auxiliary inversion. This feature, named [+q] here, drives movement of the auxiliary to it, causing main clause interrogatives in English to have *auxiliary-subject* word order.

(101) Do you like pie?



This conception of the grammar would essentially argue that having a [+q] feature is the equivalent of being INTERROGATIVE clause type. INTERROGATIVE clauses, by definition, should therefore have this feature. One issue with assuming that subject-auxiliary inversion is driven inherently by some interrogative feature is that it occurs in a number of environments (for an overview, see Bruening 2017), most of which are clearly not interrogative. Some of these environments are shown below.

- (102) a. Never again will I vote for a major-party candidate. (Affective Operator)
  - b. Had he done as he was supposed to, he would not be in this mess right now. (Conditionals)
  - c. The sun came out and so did the vacationers. (Fronted 'so')
  - d. May you never be happy again! (Curses)

It is clear that the feature that drives subject-auxiliary inversion in English is not an inherently interrogative feature, or none of these non-interrogative environments should cause the subject and auxiliary to invert. Instead, there is some feature in the syntax that forces movement, but that feature is never directly associated with clause type. There are many linguistic objects that are clearly interrogatives, yet lack subject-auxiliary inversion.

- (103) a. Kangaroos have pouches? (Surprise)
  - b. I wonder if John has left. (Embedded)
  - c. Bill said what? (Echo)
  - d. You're leaving, right? (Confirmation)

If we remove the notion of morphosyntactic clause-types from our system, leaving operators, then the imperative operator is not necessarily bound to appear with imperative morphology. That is to say, the operator is not dependent on being in imperative clause-type at all, but is independent of it. Imperative elements, then, could co-occur with declarative and interrogative elements, if the syntactic and semantic combination is permitted within a given language. We have already seen in the case of GPs, that an imperative operator can co-occur with a declarative TP. In classical Latin, imperative morphology can co-occur with the interrogative element *quin*, which is a contraction of *qui non*, and means "why not."

(104)	a.	quin	omitt-	e n	ne!			
		WHY.NOT	LET.G	O-IMP N	IE.ACC			
		'Why don't you leave me alone?'					(Terence, Phormio, Act 3)	
	b.	quin	tu	aud	-i!			
		WHY.NOT	YOU.N	IOM LIS	TEN-IMP			
'Why don't you li			isten?'	en?'			(Plautus, Bacchides, Act 2, Sc. 3)	
	c.	quin	ego	hunc	agred-ior	de		ill-a?
		WHY.NOT	I.NOM	HE.ACC	CONFRON	г-1sg ab	OUT	HER-ABL
'Why don't I confront him about her?'				n about her?	,		(Plautus, Mercator, Act 2, Sc. 3)	

A closed theory of clause types, such as the kind argued for by Sadock & Zwicky (1985), cannot account for such a pattern. Interrogative elements should never be able to mix with imperative morphology. Under the conception of the grammar presented in this paper, however, this type of combination is in principle possible. I am optimistic that such an approach can solve a long-standing mystery regarding *do-support* and the verb "be" in certain questions in English. Questions like the following have been traditionally referred to as "whimperatives" since Sadock (1970). Green (1975) points out that an utterance like the following typically can only be interpreted as a type of suggestion, and never as a question.

(105) Why don't you be quiet!

I take, at least for "why not" questions in English, the portmanteau "whimperative" seriously. It is typically assumed that the morphosyntactic form of (105) is interrogative, because it has a wh-element. Curiously, however, *do-support* is triggered, even with the verb "to be," when it is normally not in interrogative environments. (105) does not have the same meaning as (106) below.

(106) Why aren't you quiet?

It is well-known that "to be" triggers do-support in imperatives, but not in non-imperatives (Beukema & Coopmans 1989; Potsdam 2007; Han 1998). If we analyze whimperatives as imperatives, then we can allow for a combination that would not be possible under other approaches, where a wh-element directly associates with an imperative clause. In other words, there is an imperative operator in (105) that effects imperative morphosyntax. The wh-element "why" combines directly with the imperative. Below is a derivation of what this might look like.



The existence of such a clause-type is straightforward in this system, given that multiple operators may be able to combine, and affect the morphosyntax simultaneously. The imperative operator provides imperative interpretation and morphology, whereas the [+q] feature requires a wh-element on Spec-CP. Although the discussion here on clause-type mixing is necessarily limited, I am optimistic that this view of the grammar can lead to insights about the nature of the syntax that have previously gone unnoticed.

## 6 Conclusion

This paper has identified both the morphosyntactic and semantic/pragmatic properties of a novel construction, termed herein "general prohibition." In addition, an analysis was proposed that involves an imperative operator selecting a declarative TP. This TP contains the modal "allowed," which moves at LF to ModP, a projection required by the imperative operator. The restrictions on the distribution of GPs fall out from restrictions on the operator, and the morphosyntax of declarative clauses. The operator contributes imperative semantics to GPs, providing the same range of uses as imperatives. The ability of the imperative operator to combine with a declarative TP has interesting implications for theories of clause types.

## References

- Abney, Steven P. 1987. *The English Noun Phrase in its Sentential Aspect*: Massachusetts Institute of Technology dissertation.
- Aikhenvald, Alexandra Y. 1999. Areal Diffusion and Language Contact in the Iana-Vaupes Basin, Northwest Amazonia. See Dixon & Aikhenvald 1999. 385–416.
- Asher, Nicholas. 2000. Discourse structure and the logic of conversation. In *Current research in the semantics pragmatics interface*. Citeseer.
- Asher, Nicholas. 2012. *Reference to abstract objects in discourse*, vol. 50. Springer Science & Business Media.

Asher, Nicholas & Alex Lascarides. 2001. Indirect speech acts. Synthese 128(1-2). 183–228.

Baker, Mark. 2005. On gerunds and the theory of categories. Ms., Rutgers University .

- Beukema, Frits & Peter Coopmans. 1989. A government-binding perspective on the imperative in english. *Journal of linguistics* 25(2). 417–436.
- Bruening, Benjamin. 2017. Subject–auxiliary inversion. *The Wiley Blackwell Companion to Syntax, Second Edition* 1–28.
- Condoravdi, Cleo & Sven Lauer. 2012. Imperatives: Meaning and illocutionary force. *Empirical issues in syntax and semantics* 9. 37–58.
- Crnič, Luka & Tue Trinh. 2009. Embedding Imperatives. North East Linguistic Society (NELS) 39.
- Culicover, Peter W. 1992. English tag questions in universal grammar. Lingua 88(3-4). 193–226.
- Curme, George Oliver. 1905. A grammar of the german language. Macmillan.
- Davies, Eirlys. 1986. The English Imperative. Croom Helm.
- Green, GM. 1975. How to get people to do things with words: The whimperative question. In *Speech acts*, 107–141. Brill.
- Grice, Herbert P. 1975. Logic and conversation. In Speech acts, 41-58. Brill.
- Han, Chung-Hye. 1998. The Syntax and Semantics of Imperatives and Related Constructions. *PhD diss., University of Pennsylvania*.
- Huddleston, Rodney & Geoffrey K Pullum. 2002. The Cambridge Grammar of English. *Language*. *Cambridge: Cambridge University Press* 1–23.
- Hudson, Richard. 2003. Gerunds Without Phrase Structure. *Natural Language & Linguistic Theory* 21(3). 579–615.
- Iatridou, Sabine. 2019. Negation Licensed Commands. Ms., Massachusetts Institute of Technology
- Kaufmann, Magdalena. 2012. *Interpreting imperatives*, vol. 88. Springer Science & Business Media.
- Keshet, Ezra & David J Medeiros. 2019. Imperatives under coordination. *Natural Language & Linguistic Theory* 37(3). 869–914.
- Kratzer, Angelika. 1981. The Notional Category of Modality. In H.-J. Eikmeyer and H. Reiser (eds.), Worlds, Words, and Contexts 38–74.

- Lascarides, Alex & Nicholas Asher. 1993. Temporal interpretation, discourse relations and commonsense entailment. *Linguistics and philosophy* 16(5). 437–493.
- Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford University Press on Demand.
- Oikonomou, Despina. 2016. *Covert modals in root contexts*: Massachusetts Institute of Technology dissertation.
- Platzack, Christer & Inger Rosengren. 1997. On the subject of imperatives: A minimalist account of the imperative clause. *The Journal of Comparative Germanic Linguistics* 1(3). 177–224.
- Portner, Paul. 2004. The semantics of imperatives within a theory of clause types. In *Semantics and linguistic theory*, vol. 14. 235–252.
- Portner, Paul. 2007. Imperatives and Modals. Natural Language Semantics 15(4). 351-383.
- Portner, Paul, Miok Pak & Raffaella Zanuttini. 2019. The speaker-addressee relation at the syntaxsemantics interface. *Language* 95(1). 1–36.
- Potsdam, Eric. 2007. Analysing Word Order in the English Imperative. Imperative Clauses in Generative Grammar: Studies Offered to Frits Beukema. Amsterdam: John Benjamins 251–271.
- Potsdam, Eric. 2017. Syntactic issues in the english imperative. Routledge.
- Potts, Christopher. 2000. When even no's neg is splitsville. URL: http://ling.ucsc.edu/Jorge/potts. html.
- Reuland, Eric J. 1983. Governing-ing. Linguistic inquiry 14(1). 101–136.
- Rivero, María Luisa & Arhonto Terzi. 1995. Imperatives, v-movement and logical mood. *Journal* of linguistics 31(2). 301–332.
- Rooth, Mats. 1992. A theory of focus interpretation. Natural language semantics 1(1). 75–116.
- Ross, John Robert. 1967. Constraints on variables in syntax.: MIT dissertation.
- Sadock, Jerrold M. 1970. Whimperatives. JM Sadock and A. Vanek Studies Presented to RB Lees by his Students 223–38.
- Sadock, Jerrold M & Arnold M Zwicky. 1985. Speech Act Distinctions in Syntax. *Language typology and syntactic description* 1. 155–196.
- Schmerling, Susan. 1982. How imperatives are special, and how they aren't. *Papers from the Parasession on Nondeclaratives, Chicago Linguistic Society* 202. 218.

- Seiss, Melanie, Miriam Butt, Tracy Holloway King et al. 2008. The English-ing Form. *Proceedings* of LFG08 454.
- Tsimpli, Ianthi-Maria. 1995. Focusing in modern greek. *Discourse configurational languages* 176. 206.
- Wasow, Thomas & Thomas Roeper. 1972. On the Subject of Gerunds. *Foundations of language* 44–61.
- Xrakovski, Viktor Samuilovich. 2001. *Typology of Imperative Constructions*. Lincom GmbH, M, nchen.
- Zanuttini, Raffaella. 1997. Negation and Clausal Structure: A Comparative Study of Romance Languages. Oxford University Press.
- Zanuttini, Raffaella. 2008. Encoding the addressee in the syntax: Evidence from english imperative subjects. *Natural Language & Linguistic Theory* 26(1). 185–218.
- Zanuttini, Raffaella, Miok Pak & Paul Portner. 2012. A syntactic analysis of interpretive restrictions on imperative, promissive, and exhortative subjects. *Natural Language & Linguistic The*ory 30(4). 1231–1274.
- Zwicky, Arnold M. 1988. On the Subject of Bare Imperatives in English. *On Language: Rhetorica, Phonologica, Syntactica-A Festschrift for Robert P. Stockwell from His Friends and Colleagues* 437–450.