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Default Moods: Taking Defaults Out of Update Semantic

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DEFAULT MOODS:
TAKING DEFAULTS OUT OF UPDATE SEMANTICS

by

Kenneth Bruce Galbraith

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ABSTRACT

DEFAULT MOODS: TAKING DEFAULTS OUT OF UPDATE SEMANTICS

by

Kenneth Bruce Galbraith

The University of Wisconsin-Milwaukee, 2022
Under the Supervision of Professor Peter Van Elswyk

Recent theorizing about speech-acts concerns answering, what [Portner \(2016\)](#) calls, *the conventionalization question*: in virtue of what linguistic-mechanism are sentence-types related to their canonically associated forces? For instance, what is it for a declarative-typed clause to be linked with assertoric force? Answers to the conventionalization question can be broadly characterized as falling under two camps: The Dynamic Pragmatic Approach and The Dynamic Semantic Approach. Proponents of the Dynamic Pragmatic Approach (*inter alia*, [Portner \(2016\)](#) and [Roberts \(2018\)](#)) typically claim that clauses fall under particular sentence-types in virtue of their semantic content. The sentence types, then, are associated with forces in virtue of pragmatic linking principles. On the other side, Proponents of the Dynamic Semantic Approach (e.g., [Murray and Starr \(2020\)](#)) argue that the conventional link between sentence-type and force cannot be grounded in pragmatic reasoning; rather, the conventions exhibit features of a compositional semantics. Nonetheless, both approaches represent a departure from theorizing about force from a traditional speech-act theoretic perspective. Thus, this paper proposes a novel answer to the conventionalization question from a speech-act theoretic approach. The proposal suggests that the sentence-types and their canonical forces are linked via pragmatic principles, yet it differs from extant theories by grounding them in a peculiar, under-studied phenomena—namely, default meanings. As such, the resulting proposal either addressees or sidesteps criticisms that accompany pragmatic answers to the conventionalization question.

Table of Contents

List of Tables	iv
1 Default Determination	1
2 Default Meanings	3
2.1 Earmarks to Default Meanings	4
2.2 Default Rules	8
3 Revisiting a Past Proposal	11
4 Default Conditions	13
4.1 Default Declaratives	17
4.1.1 Conventionalized Indications of Overriding Conditions	19
4.1.2 Pragmatic Features of Overriding Conditions	21
4.2 Default Interrogatives	22
4.2.1 Conventionalized Indications of Overriding Conditions	24
4.2.2 (B) Pragmatic Indications of Overriding Conditions	27
4.3 Default Imperatives	28
5 The Added Support	32
6 References	35

List of Tables

1	Sentence Types	1
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1 Default Determination

Recent theorizing about speech-acts concerns answering, what [Portner \(2016\)](#) calls, *the conventionalization question*: in virtue of what linguistic-mechanism are sentence-types related to their canonically associated forces? For instance, what is it for a declarative-typed clause to be linked with assertoric force?

Sentence Types	Associated Sentential Force
Declaratives	Assertoric Force
Interrogatives	Inquisitive Force
Imperatives	Directive Force

Table 1: Sentence Types

In theorizing about the link between sentence-types (or, the intimately related notion of grammatical mood) and sentential-force, various philosophers and linguists have used similar language:

“The indicative mood is, ordinarily, a sign of assertoric force”

([Dummett, 1993](#)).

“In natural language, the default use of declarative sentences is to make assertions”

([Williamson, 2000](#)).

“[...]the basic sentence types have a certain functional potential or default interpretation [...]”

([König and Siemund, 2007](#)).

“the choice of mood in a clausal utterance is reflected in a default correlation to one of the three basic types [...]”

([Roberts, 2018](#)).

Taken literally, all of these claims suggest a crude view regarding the link between sentence-types and sentential forces: sentence-types—under default conditions—determine their canonically associated forces. This view, however, does not just restate the fact that

the relation between sentence-type and force is defeasible. Rather, the view is that the uses of sentence-types license interpreters to infer sentential forces, and that meaningful inference is defeasible. In other words, force is a *default meaning* or *interpretation* from sentence-type.

Although the view is undeveloped, it's already virtuous for a variety of reasons. First, it partly explains the robust, cross-linguistic observations which associate universal sentence types with certain illocutionary forces. Declaratives seem to canonically pattern with assertoric force; interrogatives with inquisitive force; and imperatives with directive force.¹ Consequently, these observations are explained by the fact that the use of sentence-types, under default conditions, produce their respective canonical force.

Second, the view countenances the fact that sentence-types and their canonical forces are defeasibly related. For instance, the very notion of *indirect speech* implies that different utterances of the same sentence may produce different illocutionary forces. Nonetheless, the idea that force production is mediated by default conditions provides a straightforward way to account for this defeasibility: sentence types will under-determine their canonical forces when default conditions do not obtain. (Although, more will need to be said about what this amounts to).

Despite the obvious virtues, the thought that sentence-type determines force via default inference is one that has received little attention. From the side of linguists (e.g., [Farkas \(2020\)](#); [Farkas and Bruce \(2009\)](#); [Farkas and Roelofsen \(2017\)](#); [Roberts \(2018\)](#)), implementations of pragmatic principles linking sentence-types with forces often characterize them using the term 'default'. However, to my knowledge, all of the proposals leave these principles and any notion of 'default' unanalyzed. They merely stipulate that the principles are grounded by Gricean-reasoning without any precise account; nor do they explain the manner in which the principles are 'defaults'. On the side of philosophers, only a few handful have appealed to default inferences in linking sentence-types with

¹See [Sadock and Zwicky \(1985\)](#) and [König and Siemund \(2007\)](#) for comprehensive analyses and empirical support.

forces.² Yet, these philosophers have failed to flesh out predictive accounts regarding the defeasible nature of default relations/meanings. Thus, one of the purposes of this paper is to fill this lacuna.

Ultimately, the novel contribution of this paper is developing a framework for the link between sentence-types and their canonically associated forces from the perspective of speech-act theory. The proposal suggests that the sentence-types and their canonical forces are linked via pragmatic principles, yet it differs from extant proposals in grounding them in a peculiar, under-studied phenomena—namely, default meanings. As such, the resulting framework either addressees or sidesteps criticisms that accompany pragmatic approaches of linking sentence-types with forces.

The paper is plotted as follows. In Section 2, I introduce a notion of ‘default meanings’, and I highlight their hallmark features. Moreover, I acquaint readers with the tools needed to model default inferences. In Section 3, I note the shortcomings of a past proposal for the purposes of developing an account that circumvents these inadequacies. In Section 4, I detail the account by claiming that the default inference of force from sentence-type is facilitated by an *epistemic attitude* condition. I work out the details of this condition for each of the universal sentence-types and their respective forces. In Section 5, I conclude by addressing a criticism of pragmatic approaches for linking sentence-types and forces, and I gesture towards future developments.

2 Default Meanings

This section briefly introduces and elucidates the notion of ‘default meanings’, and the tools to model them. First, I present some hallmark features of phenomena that broadly fall under the label of ‘default meanings’. Second, I identify features specific to the default

²García-Carpintero (2004) and suggestions in Charlow (2011) embody notable exceptions, to which this paper is lends heavily from. More generally, this paper is heavily indebted to Bach and Harnish (1979)’s closely related notion of ‘illocutionary standardization’ and the thought that mood and force are mediated by attitudes. And, Perrault (1987)’s appeal to default logic in speech-acts.

meanings for sentence-type and force (as opposed to other default meanings). Lastly, I introduce some formalism as a way of sketching a characterization of the default inference.

2.1 Earmarks to Default Meanings

So far I've appealed to a notion of default inferences or meanings as if there's a consensus on its identifying criteria. However, this is far from the truth. The various phenomena that purportedly fall under the label of "default meanings" are vastly disparate. Thus, no proposed criteria appear to encompass all the candidate phenomena in a principled way. For instance, [Bach \(1984, 1994\)](#) introduces *impliciture* as default inferences that pragmatically enrich logical-forms. For example, the proposition expressed by "That lamp is cheap" is defaultly interpreted to the enriched proposition "That lamp is cheap relative to other lamps". Alternatively, [Cohen and Kehler \(2021\)](#) highlight a phenomena they call conversational *eliciture*. E.g., hearing "A jogger was hit by a car in Fresno last night" licenses the defeasible inference that the 'jogger' was hit while jogging.³ Yet, similar inferences don't arise in minimally-different sentences containing other referring expressions. To illustrate, hearers don't infer that, say, a teacher was hit while teaching from "A teacher was hit by a car". Despite both being defeasible inferences, they exhibit significantly different features.⁴ Implicitures, unlike elicitures, are triggered via the violation of grammatical or pragmatic constraints. And, elicitures, unlike implicitures, are non-semantic enrichments of the utterance—i.e., they don't contribute to the logical-form of the sentence.

Regardless of the disparate features associated with 'default meanings', it's uncontroversial to make the following claims: default meanings are *preferred* or *presumed* interpretations that (i) arise from general cognitive, or rational, constraints on communication (whether that be something like The Cooperative Principle and its Maxims, or a notion like Coherence). And, (ii) default meanings are defeasible inferences.

³[Cohen and Kehler \(2021\)](#) attribute this example to [Hobbs \(1990\)](#)

⁴[Cohen and Kehler \(2021\)](#) don't outright label eliciture as a 'default meaning'.

While both claims hold for all candidate ‘default meanings’, they fail to exclude other non-default projective-content, like conversational implicature.⁵ That is, conversational implicatures are produced in virtue of general constraints on rational communication (i.e., The Cooperative Principle) and they’re defeasible insofar as they’re cancellable. Given this issue, I outline some individuating features of ‘default meanings’ broadly construed, and ones specifically associated with sentence-types and forces. (Note, further insights regarding default inferences will be fleshed out in Section 4).

The hallmark feature of default meanings is not defeasibility *simpliciter*, but rather the particular way they are defeasible. The crucial difference is that conscious pragmatic inferences, like conversational implicature, are forms of interpretative reasoning *from* defaults (i.e., violations or infelicities from the default inferences or assumptions).⁶ Yet, implicature is distinct from the default inferences *themselves*. This difference accounts for the variation in their defeasibility.

To elaborate, consider the defeasibility of conversational implicature as paradigmatic conscious pragmatic inference. The distinctive feature of implicature is *cancellability*: one can felicitously utter the negation of the inferred content (without contradiction). For example, consider the following relevance implicature.

- (1) [S attempts to fall asleep, and notices H get up from the couch]
- a. S : It’s bright in here

The thought is that S’s utterance confuses H; they perceive it as a violation of some default assumption (i.e the maxim of relevance). H wonders how the lighting is relevant to the current situation. Since H assumes that S is cooperative, H reinterprets the content of S’s utterance such that it is. H reasons from the possible intentions from S, like S wanting to sleep in the dark, to the effect that they implicate some cooperative content.

⁵Grice (1967)

⁶Another similar way of caching out the distinction is that default meanings are *presumptive* inferences. On the other hand, conscious pragmatic inferences are *abductive*. That is, hearers reason to interpretations that best explain apparent violations of presumptive inferences. See Macagno (2017).

In this scenario S implicates a proposition like, “I want you to turn off the lights”. More importantly, S can cancel the implicated content by asserting its negation–e.g., “It’s bright in here, but I don’t want you to turn off the light”.⁷

However, default meanings aren’t calculable inferences that are triggered from some violation of a default assumption. Rather, in cases like implicature, *they are the default assumptions that are violated*.⁸ Default meanings, à la Levinson (2000), should be understood as inferences that hearers automatically presume in interpretation. As such, they cannot be simply cancelled via overtly expressing the negation of the inferred content.⁹ If one tries to, hearers employ conscious inference such that they reinterpret the utterance as preserving the default inference or assumption (as in implicature).

Instead of being cancellable, default meanings are defeasible by being *overridable*. That is, features of interpreting the utterance *preempt* one from automatically presuming the default meaning. Viz., the inference fails to arise, as opposed to being produced and then canceled (as in conscious pragmatic inference). To illustrate, consider the following conversations:

(2) [S wants to schedule a meeting one week from today, which happens to be a Friday]

- a. H : When can we meet next?
- b. S : We should meet on Friday.
- c. Preempted Inference: “Friday” refers to the day of S’s utterance.¹⁰

(3) [H is inquiring as to S’s availability]

- a. H : What are you doing tomorrow afternoon?
- b. S : I have work or I’m going to the dentist.

⁷Of course this will then trigger H to reason to another implicated content such that S’s utterance is as being cooperative. For instance, perhaps S just wants the lights to be dimmed.

⁸(McCready, 2014, Ch 4.3) gives the same account for Gricean Maxims.

⁹Most of Levinson’s Conventional Implicatures are cancellable without contradiction. The inference from Levinson’s account that are of special interest stem from ‘I-heuristics’.

¹⁰Taken from Levinson (2000), which is adapted from Fillmore (1975).

- c. Preempted Inference: the “or” of B’s utterance need be interpreted as exclusive or inclusive (i.e., as “and”).

Both (2) and (3) exemplify cases where interpreters are preempted from inferring some presumptive content. In the case of (2), the initial context doesn’t make clear what date is referred to by “Friday”. However, it’s clear to B that A is not referring to the day of the utterance, for the use of “today” is a more informative way of referring to the day of the utterance than “Friday”. Thus, A’s use of “Friday”—over “today”—preempts B from inferring that A wants to meet again that day. Likewise in (3), it’s widely recognized that the English disjunction “or” can be interpreted as either exclusive or inclusive. Yet, some have highlighted the fact that some contexts do not invite hearers to make said interpretations.¹¹ (3) exemplifies this. It is irrelevant to the question (or, conversational aims) whether B will *both* go to work and to the dentist, or *only one* of them. What’s important is that B communicates that they’re busy tomorrow afternoon. As a result, A need not infer either reading of “or”.

Having covered the distinctive feature of default meanings, I also highlight features specific to the default inference from sentence-type to force: the default meaning associated with sentence-type is (i) non-local and (ii) they constitute ampliative enrichments.

First, the default interpretation of force by sentence-type is non-local. The previous examples of default meanings only involved default inferences that are triggered by lexical items: the particular use of a referring expressions like “jogger”, and relational-adjectives, like “cheap”. However, the inference of force from sentence-type must be global, or post-utterance. For, the interpretive process requires hearers to identify the sentence-type of a particular utterance. Although I refrain from taking a substantive stance on how sentences are typed, it’s clear that the process is not properly “local”.¹² For instance,

¹¹E.g. [Van der Auwera and Bultinck \(2001\)](#) observe contexts where there is no need for an interpretation inclusive or exclusive readings.

¹²That is, it’s thorough-going with proponents of dynamic-pragmatics to argue that sentences are typed in virtue of their semantic-value (e.g., [Pak et al. \(2008\)](#) and [Zanuttini and Portner \(2003\)](#)). Whereas, proponents of dynamic semantics, like [Murray and Starr \(2020\)](#), follow typo-logical research in thinking

the use of rising-intonation, which is not a local property of utterance, is a common cross-linguistic marker for speakers to signal question-like force.¹³ Therefore, insofar as sentence-type identification makes use of non-local properties of utterances, then the default interpretation of force by sentence-type isn't local.

Second, the default interpretation of force by sentence-type is a pragmatic enrichment, as opposed to an expansion on the utterance's logical form. This simply follows from the thought that force doesn't contribute to the truth-conditions of an utterance. Viz., force is a property of utterances—not sentences. Thus, the default meaning for sentence-types and forces are enrichments that do contribute to the sentence's logical form or truth-conditions.

2.2 Default Rules

Now, having delineated the features of default meanings, I introduce some tools needed to model default inferences. Following Reiter (1980), I define defeasible inferences ($\phi > \psi$, where “>” represents non-monotonic entailment) as default rules that take the following form:

$$\phi > \psi =_{df} \frac{\phi:\gamma}{\psi}$$

Where ϕ is the *precondition*, that triggers the inference to the *conclusion* ψ , under the *justification* that γ is consistent with some information state (say, the interpreter's beliefs). In English, the default rule can be read schematically as, “if ϕ is true, and γ is consistent with our beliefs; then we infer ψ ”. To illustrate, the defeasible generalization that “Swans are normally white’ may be paraphrased as “For any x such that, if x is a swan, and it's consistent to believe that x is white, then we may conclude that x is white”.¹⁴

that sentences are typed in virtue of systems constitutive of morpho-syntactic markers.

¹³I do not wish to commit myself to nature of intonation in relation to sentence-types, other than the fact that its part of the interpretive process for sentence-types.

¹⁴N.B., “normal/typical” default rules, such as “Swans are typically white” are instances where a single justification is equivalent to the conclusion.

To motivate the appeal to default logic, I argue that the default rules, as formulated above, intuitively capture the defeasible nature of default meanings.¹⁵ That is, such rules neatly model how the inferences are *overridden*. The general idea is that default inferences are *preempted* insofar as the relevant *justification(s)* is not consistent with some body of information. To illustrate, consider a way one might implement default rules in modeling the exclusive or inclusive interpretations of “or”. The precondition (i.e., what triggers the inference) would be the use of “or” and the conclusion would represent both interpretations. Remember that both interpretations are preempted in contexts where neither is relevant to the communicative purposes. So, the *justification* for such a default rule would represent this condition. That is, if it’s inconsistent to represent either interpretation as relevant to the communicative purposes, then some information state (which represents the conversation context) will preempt the inference for both interpretations.¹⁶

Furthermore, using these default rules, we can begin to model the inference from sentence-type to force.¹⁷ At its core, we want to acknowledge that the inference from sentence-type to force is an interpretive process: first interpreters utilize the various markers that signal sentence-type, then interpreters defaultly infer an accompanied force in virtue of the identified sentence-type. To make this more precise, let’s introduce some notation to represent both processes. For the process of how hearers identify the utterance of sentence-types:

- Where $[u]^\tau = \tau : u$ represents an interpretive function from utterances ‘ u ’ to one of the universal sentence types ‘ τ ’ such that $\tau = \{\Delta : u, ? : u, ! : u\}$.
- And, $\Delta : u = u$ is a declarative, $? : u = u$ is an interrogative, $! : u = u$ is an imperative

And, for the mechanics of the mapping of sentences to the three canonical forces:

¹⁵Ultimately, my use of Reiter (1980)’s default logic is not essential. Readers should take the proposal as a proof of concept, and that more sophisticated non-monotonic logics may be required.

¹⁶This can be represented/ modeled in a variety of ways. All of which depend on how one models conversational contexts and the notion of *relevance* with respect to those contexts.

¹⁷An intital proposal of this sort can be traced back to Perrault (1987)

- Where $S[[\phi]]^c$ indicates that some content ϕ is uttered with a force S at context c .
- And, S represents the three canonical forces:
- $Assert. [[\phi]]^c$ = speaker asserts $[[\phi]]$ in c .
- $Inquire. [[\phi]]^c$ = speaker asks $[[\phi]]$ in c .
- $Direct. [[\phi]]^c$ = speaker commands $[[\phi]]$ in c .

Thus, we can make a general formulation for the default inference from sentence-type to force as:

$$\tau : u > S[[\phi]]$$

And, for each of the specific sentence types and their respective forces we get:

- $\Delta : u > Assert. [[\phi]]$
- $? : u > Inquire. [[\phi]]$
- $! : u > Direct. [[\phi]]$

Now we need to define each inference as a default rule. It's straightforward that the identification of a sentence-type (generally indicated $\tau : u$) will serve as the *precondition* for such rules. The forces (generally notated as $S[[\phi]]$) will be the conclusion. However, it's not obvious what the *justification* for the rule will be. It's not obvious what hearers must assume insofar as they infer force from sentence-type—i.e., what are the default conditions? Likewise, it's not obvious what preempts hearers from inferring canonical forces from the three sentence types—i.e., what are the overriding conditions? As a way to guide further reasoning, I suggest that we look at a past-proposal.

3 Revisiting a Past Proposal

This section reconsiders an extant proposal as a starting point for thinking about the default rule for sentence-types and their canonical forces. More specifically, we're looking for an answer to what the *justification* for such a rule will be. In doing so, we'll highlight the inadequacies of the past proposal for the purposes of developing a more robust account.

As noted, the thought that sentence-type determines force via default inference is one that has received little attention by philosophers. However, [García-Carpintero \(2004\)](#) is a notable exception. The proposal can be summed up by the following:

In a minimal context (a context without more information than that derived from the presumption that the participants know the language), that force would be unconditionally signified [by mood or sentence type], all things considered; but the default assumption could be overridden in other contexts by an open-ended list of conditions: that the alleged assertion has been made after 'once upon a time', or after 'let me remind you of the following', or 'therefore', or in an exam, or includes parentheticals like 'I surmise' (2004, Pg. 115-116).

On first glance, García-Carpintero's proposal seems to nicely track our earlier reasoning. Roughly, their proposal is that sentence-types, like, declaratives will determine force, like assertoric force, insofar as no *overriding conditions obtain*—i.e., conditions that mark non-default contexts. Viz., the use of a sentence type, in a 'minimal context', serves as the *precondition* (i.e., what triggers the default inference to force). Additionally, the default inference is one that can be preempted in overriding conditions.

Nonetheless, the proposal leaves a lot unanalyzed. My reservations towards the proposal are two-fold: (i) The proposal fails to situate sentence-types in a broader theory of speech acts. And (ii), The proposal provides no principled explanation about the nature of the default inference.

Concerning (i), it leaves unanalyzed why any particular force or speech act is defaultly determined by their related sentence-type. For instance, the account fails to answer why or how a *particular use* of a declarative, as opposed an imperative or interrogative use, defaultly determine assertoric force. Second, the account fails to *precisely locate* where the default relation resides within our division between the interface of semantics and pragmatics: can speakers signal overriding conditions through semantics means, or must they always be pragmatically worked out by addressees?

Regarding (ii), the account is not predictive. It gives no robust explanation of what the default conditions are, and what it takes for them to be overridden. The proposal merely states that one creates a *post-hoc* list of overriding conditions.¹⁸ Left as such, it's poorly motivated in appealing to a *notion of defaults*. Given that it lacks any principled explanation about the nature of default conditions (and their respective overriding conditions), it's not obvious that the proposal is anything over and above other accounts.

Having highlighted the inadequacies of this proposal, we are in better position to structure further theorizing about the default inference linking sentence-type and force. Ultimately, the inadequacies of García-Carpintero's proposal suggest that any other account must provide robust analysis of the following:

- **Default Conditions (DC):** In virtue of what do default conditions facilitate the interpretation of each sentence-type with their canonical forces? That is, in terms of formulating a default rule, what utterances represent scenarios where the precondition and justification obtain?
- **Overriding Conditions (OC):** In light of an answer to DC, what are the conditions that preempt addressees from interpreting the canonical forces from their respective sentence-types? Again, in terms of a default rule, what utterances represent scenarios where the precondition obtains but the justification doesn't?

¹⁸This concern follows after [van Elswyk \(2021\)](#).

- **Exploitation (E):** Given an account of OC, through what means—either semantic or pragmatic properties—can speakers indicate, or bring about, overriding conditions?

The remainder of my proposal will work out the details for each desideratum.

4 Default Conditions

So, just what are the default conditions; and what are the conditions in which the defaults are overridden? Where should one look? Ultimately, I argue that the answer lies in traditional speech-act theory.

As a general methodological point, one should approach the issue backwards— starting from the canonical forces in question. The thought is that any theory linking the basic sentence-types and their canonical forces needs to make some assumptions about what in fact the speech acts associated with those forces *are*. More precisely, one must make some assumptions about the features that identify or individuate the canonical forces: e.g., what features of assertion uniquely identify assertoric force?

Moreover, any predictively accurate account needs to identify some *common element* or *relation* of the default conditions of a sentence type with the features which uniquely individuate the force canonically associated with that sentence type. Other accounts that do not appeal to some common element/relation that individuates—namely, the element/relation is not unique to that force— will run the risk of over-generating forces.

To illustrate, suppose one doesn't appeal to a unique common element/relation by way of defaultly linking sentence-types with their canonically associated forces: one posits L as the common element contained in the default conditions for a sentence-type T , yet L is not unique to any of the individual canonical forces. Hence, L is identified with multiple forces, say, F_1 and F_2 . Thus, the utterance of sentence with type T , when L obtains, will determine the forces, F_1 and F_2 —the proposal will over-generate. A theory that

assigns a single sentence-type to multiple forces is not inherently flawed. Infact doing so might be virtuous for accommodating cases of indirect-speech.¹⁹ However, the current project aims to link each sentence-type with their canonically associated force under default conditions. So the mapping of sentence-types and forces under default conditions needs to be one-to-one.

A natural way of rescuing the current proposal is to claim that other non-default conditions of a sentence-type will further determine which of the multiple forces is produced. For instance, the utterance of a sentence with type T under conditions L , will determine force F_1 and F_2 . And, whether F_1 or F_2 is produced is dependent on some other semantic or pragmatic feature. While this maintains a one-to-one mapping of sentence-types, an upshot of the rescue proposal is that sentence-types under default conditions don't *alone* determine force. Like in [García-Carpintero \(2004\)](#), this calls into question our appeal to default meanings.

So, the question regarding **DC** can be better formulated as:

Common Element (CE): What uniquely individuating features or conditions of the canonical forces could serve as default conditions for their sentence types?

I claim that the most natural candidates for **CE** are *propositional attitudes*. This is motivated by what some have called the “the standard picture”—a various assortment of claims passed down from the foundations of speech act theorizing (amongst others, [Searle \(1969\)](#); [Austin \(1962\)](#); [Bach and Harnish \(1979\)](#)).²⁰ Part of the standard picture is the claim that speech acts are, in essence, vehicles for expressing speakers’ psychological attitudes or mental states. Another part of the standard picture is that mood functions as an indication of the utterance’s force—mood is a ‘force indicating device’.²¹ Taking both claims into consideration, it’s natural to understand the link between sentence-type and force as being mediated by speaker attitudes. This gives use the following picture:

¹⁹E.g. See [Asher and Lascardes \(2001\)](#)

²⁰See [Charlow \(2011\)](#) and [Recanati \(2013\)](#)

²¹Searle (1969:Pg. 30)

speakers may utter a sentence S consisting of type τ with the default condition of some attitude A ; the attitude serves as an indication of S 's force F because A is a unique attitude conventionally used to perform speech acts with F . Thus, the use of sentence-types invite default inferences to the effect that the speaker holds some psychological attitude.

Now here's a more substantive suggestion: following [Bach and Harnish \(1979\)](#), [Perrault \(1987\)](#), [Wilson and Sperber \(1988\)](#), one can model the ways in which speaker attitudes mediate the link between sentence-type and force in terms of *propositional attitudes*. This comes with the commitment that the psychological attitudes uniquely associated with particular forces can be adequately expressed as propositional attitudes. That is, for every pairing of sentence-types and forces, there must be some propositional attitude associated with the psychological attitude unique to that force. Some might worry that there aren't enough propositional attitudes, nor do they adequately express the relevant speaker attitude. I think this assumption isn't worrisome for a couple reasons.

First, following a traditional speech act theory, the canonical acts are analyzed and individuated via sets of conditions stated in terms of speaker attitudes (e.g., [Searle \(1969\)](#): Pg. 66-67, and [Bach and Harnish \(1979\)](#): Ch.3). These speaker attitudes are further stated in terms of propositional attitudes.²² Second, the speaker attitude associated with a type-force pair do not need to be represented as a *single* propositional attitudes. One can represent the speaker attitude associated with some speech act via *complex propositional attitudes* that are formed from 'basic' propositional attitudes. That is, so long as the complex propositional attitude (or rather the conjunction of those basic propositional attitudes) individuates a particular force.²³

To illustrate, suppose one wants to model the forces associated with exclamatives as being mediated by a speaker attitude which is characteristically identified by the propositional attitude 'I'm surprised that ϕ '. So, exclamative-types, like "He's so tall!", will

²²Also see [Charlow \(2011\)](#):Ch 3.

²³This works off [Wilson and Sperber \(1988\)](#)'s proposal; and ameliorates the worry that every speech-act needs to be associated with a particular and unique propositional attitude

invite default inferences to exclamative-force in virtue of the fact that exclamative-types are associated with an attitude represented by the form ‘I’m surprised that he is tall’. Additionally, one might further divide sub-types of exclamatives on the basis of speaker attitudes that also include some emotional aspect. These attitudes can be represented through *complex propositional attitudes*. For example, the exclamative sub-type identified with ‘That’s disgusting!’ is linked to a complex attitude formed by the conjunction of propositional attitudes with the form ‘I’m surprised that ϕ ’ and ‘I’m glad that ϕ ’ (where ϕ represents the type-less content of exclamatives). Ultimately, the fact that one can represent the relevant speaker attitudes as complex attitudes ameliorates the worry that every force needs to be associated with a particular and unique propositional attitude.

Now that I’ve argued that propositional attitudes serve as well-suited candidates for CE, we can identify which propositional attitudes serve as the default conditions for each sentence-type and canonical force pair. I argue that the relevant propositional attitudes are *epistemic*: in the subsections to follow, I argue that the epistemic attitude for declaratives and assertoric force is *knowledge*; the attitude linking interrogatives and inquisitive force is the lack of knowledge—namely, *ignorance*; the attitude for imperatives is a complex constitutive of modal knowledge and desire. Moreover, much of the support for the idea that epistemic attitudes facilitate default interpretation lends from its explanatory strength. That is, the proposal is able to unify and explain a variety of data regarding clauses, which fall under the basic sentences-types, as either being default or non-default uses—i.e., when default conditions obtain or are overridden. (Ultimately, I claim, in the following sub-sections, that propositional attitudes which serve as the default conditions for the default inference from sentence-type to force are epistemic. However, the account should be taken to be amenable to additional propositional attitudes in the default conditions for each sentence-type and force. The following account solely focuses on epistemic attitude for reasons of paper-length and the demonstration of philosophical significance).

4.1 Default Declaratives

In this subsection, I claim that the default condition for declaratives and assertoric force is knowledge. In doing so, I work out how the proposal answers both **OC** and **E**. First, I flesh out how this works in terms of default-rules. Second, insofar as knowledge is the default condition for declaratives, one can vindicate recent philosophical literature on the norms of assertion. Lastly, I argue that the proposal unifies various declarative-constructions and explain how they to produce assertoric force.

Taking knowledge as the default condition for declaratives gives us the following picture: a speaker’s utterance with a declarative licenses a defeasible inference that the speaker knows the content of their declarative. Then, insofar as the hearer can safely assume speaker knowledge, he interprets the utterance as carrying assertoric force.

Represented in terms of default-logic, modeling speaker knowledge—i.e., $K_s\phi$ —as the *justification* for the declarative-assertoric rule gives us the following:

$$\Delta : u > \text{Assert.}[\phi] =_{df} \frac{\Delta : u : K_s\phi}{\text{Assert.}[\phi]}$$

The thought is that hearers can interpret a speaker’s use of a declarative as also asserting the content of that declarative (i.e., ϕ), insofar as they can *reasonably assume* or *infer* that the speaker knows the content of their declarative: that is, $K_s\phi$ is *consistent* with some information-state which represents the addressee’s beliefs (e.g., say the ‘common ground’).²⁴ This gives us a straightforward answer to **OC**: conditions that override the default inferences are such that an addressee cannot assume that the speaker knows the content of their declarative— $K_s\phi$ is inconsistent with respect to an information-state that represents the addressee’s belief.

²⁴An upshot of the current proposal is that it’s not obviously ground-able in Gricean-Maxims. That is, as stated in 2.1, The Maxims are default meanings just like the meaningful inference from declaratives to assertoric force. However, given that the defaults conditions for declaratives require knowledge and none of the maxims make reference to knowledge, then one cannot derive the default conditions of declaratives and assertion from the Gricean-Maxims. Yet, recent work, namely, [Benton \(2016\)](#) argues that one can derive knowledge from the maxims, thus the Maxims entail something like **KR**. While, I find this convincing for declaratives and assertoric force, it’s not obvious how to extend a similar analysis to the other sentence-types.

With this picture in mind, I argue that the foregoing proposal vindicates proponents of the view that assertion is intimately connected to knowledge (most notably, [Williamson \(1996, 2000\)](#), and [Unger \(1975\)](#)). These proponents assent to some formulation of the following:

Knowledge Rule (KR): Speakers assert ϕ only if they know ϕ

To note, I'd like to highlight the fact that we needn't get into the weeds concerning the precise status of the rule—e.g., whether the rule is truly a *constitutive norm*. What's important, for our purposes, is that the rule suggests an answer to **CE**: knowledge individuates assertoric force.

Moreover, taking knowledge as a default condition for declaratives allows us to accommodate the various conversational data motivating proponents of **KR**. For instance, they argue that **KR** explains the oddity of Moorean-Paradoxical sentences, like:

(4) S : It's cold outside, but I don't know that it's cold outside.

The reasoning is that, in virtue of asserting the first conjunct, the speaker represents themselves as knowing the content of the conjunct (*S* knows it's cold outside). Thus, since the latter conjunct is a disavowal of knowing the same content, the conjunction is *infelicitous*.

Regarding the current proposal, the fact that the default condition for declaratives is knowledge similarly accommodates the oddity of Moorean-Paradoxical sentences. The idea is that declaratives, like the first conjunct, trigger the default inference to assertoric force insofar as the hearer can presume speaker knowledge. So, if a hearer interprets the speaker as asserting the first conjunct, the latter conjunct will be interpreted as inconsistent with the presumption that the speaker knows the first conjunct. Also, it's important to note that the latter conjunct cannot interfere with the default inference produced by the declarative of the former conjunct. For, as previously established, default inferences are overrideable (via preemption), but not cancellable.

The more general point regarding knowledge as the default condition for declaratives, and conversational data motivating **KR** is this: the data motivates **KR** because the rule explains why assertions represent their speaker as having *knowledge*. Likewise, taking knowledge as the default condition for declaratives is equally motivated by the same data, because it can also account for why assertions made with declaratives represent speaker knowledge. That is, declaratives trigger an automatic presumption that represents the speaker as knowing the content of their declarative, which, if successful, produces assertoric force.

Now we're in a position to ask **E** regarding declaratives and assertoric force: how can speakers indicate or bring about scenarios where the addressee does not assume that the speaker knows the content of their declarative? I argue that these cases are just instances where speakers represent themselves as being *ignorant* (of their content). This happens in virtue of both 4.1.1 formal/semantic properties or 4.1.2 pragmatic features of the context.

4.1.1 Conventionalized Indications of Overriding Conditions

In line with García-Carpintero's initial observations, recent work among various linguists and philosophers (such as, McCready (2014); Benton and Van Elswyk (2020)) have identified a class of expressions under the label of "hedges". Hedged expressions are broadly characterized as those that speakers employ to qualify or weaken their communicative contributions. The paradigmatic class of hedged expressions are *parenthetical lifting constructions*. To illustrate, consider the various responses:

- (5) What were you doing last night?
- a. I was returning some video tapes, I think.
 - b. I was returning some video tapes, I guess.
 - c. He was returning some video tapes, I hear.

Now, we need not get caught up in the complexities of the compositional-semantics for

parentheticals. What's important for current proposal is that (a.-c.) lend support to the thought that speakers can exploit grammatical conventions for the purpose of indicating that their utterances are *not to be interpreted as assertions*—i.e., non-default declaratives.

In other words, the force associated with parenthetical constructions (like a.-c.), are best understood as declaratives where speakers overtly indicate that overriding conditions obtain. These constructions license addressees to infer *speaker ignorance towards the content of the preposed clause*.²⁵ To demonstrate, notice the difference between two discourses where the minimal difference is the use of a declarative containing a parenthetical clause versus a bare/default declarative:

- (6) Where can I order sea urchin?
 - a. Dorsia serves sea urchin ceviche.
 - i. ✓So, *you know* where to get sea urchin?
 - b. Dorsia serves sea urchin ceviche, I think.
 - i. ✗So, *you know* where to get sea urchin?

As indicated, (6.a.i) as opposed to (6.b.i), form an odd discourse. This is explained by the fact that (6.a) is a bare declarative, which is defaultly interpreted as an assertion. So, following an assertion of some content ϕ (like, (6.a)) with a question that presupposes that the asserter knows ϕ (like, 6.a.i) will be felicitous in virtue of the fact that it reinforces that the speaker knows ϕ . However, using a declarative containing a parenthetical (like, 6.b) signals that's the speaker is ignorant towards the content of the preposed clause. The rough idea is that parenthetical clauses that contain embedding verbs—e.g., “think”, “guess”, and “hear”—license addressees to infer ignorance on behalf of the speakers, because the embedding verbs indicate that the speaker holds an epistemic position *weaker than* knowledge. Given the they're *weaker* attitudes, the presence of the embedding verbs preempts the inference that speaker knows the content of the preposed clause.

²⁵N.B. [Simons \(2007\)](#) observes that, under certain contexts, regular embedded constructions of the same parenthetical clauses (e.g. “I think I was returning some video tapes” may license the same ignorance effects.

Therefore, since declaratives containing parenthetical clauses signal ignorance, questions that presuppose knowledge of the same content (e.g., 6.a and 6.b) cannot felicitously follow.

Furthermore, utterances of parenthetical declaratives should not be identified with assertoric force, because they cannot form Moorean-Paradoxical Sentences. For instance:

(7) Where can I get sea-urchin?

- a. ✗Dorsia serves sea urchin... But, I don't know that Dorsia serves sea urchin.
- b. ✓Dorsia serves sea urchin, I think... But, I don't know that Dorsia serves sea urchin.

Again, this is simply explained by the fact that declaratives containing parentheticals license ignorance effects. As such, conjoining a hedged declarative with a disavowal of knowledge ultimately amounts to making the ignorance effects overt. On the other hand, declaratives that don't signal ignorance allow interpreters to reasonably assume that the speaker knows the content of their declarative. Thus, declaratives, like (7.a), are defaultly interpreted as assertions and carry the presumption that the speaker knows its content, which explains why conjoining the declarative with a disavowal of knowledge is *infelicitous*.

4.1.2 Pragmatic Features of Overriding Conditions

Having established that overriding conditions for declaratives obtain through grammatical means, I argue that they also obtain in virtue of features of the conversational context. That is, there are a variety of contexts that preempt interpreters from inferring assertoric force from declarative utterances: e.g., telling a story, or reciting lines in a play.

Thinking back to our informal characterization of the default rule, $\Delta : u > \textit{Assert}.\llbracket\phi\rrbracket$, I assumed that speaker knowledge can represent the *justification* for the default inference: interpreters must be able to presume that speaker knows the content of their

uttered declarative. That is, $K_s\phi$ is *consistent* with some information-state which represents the addressee's beliefs. So, insofar as one models conversational contexts as the joint-intersection of the participants beliefs, then contexts that aren't consistent with the presumption of speaker knowledge are overriding contexts.

Furthermore, we should expect these overriding contexts to come about somewhat frequently. To borrow a notion from Yalcin (2007), one can think of conversations as have an attitudinal tone:

An attitude is the conversational tone of a group of interlocutors just in case it is common knowledge in the group that everyone is to strike this attitude towards the propositions which are common ground (Pg. 1008).

Thus, the default rule will predict that any context where the conversational tone is *less than knowledge* is a context where declaratives cannot be defaultly interpreted as assertions. For example, actors in plays presumably hold some non-epistemic conversational tone. Namely, there is some coordinated pretense that the actors should not be taken to know the content of their uttered declaratives. As a result, audience members do not interpret the actors as performing genuine assertions.²⁶

4.2 Default Interrogatives

This sub-section extends the framework to interrogatives and inquisitive force. First, I argue for a candidate for **CE**. Second, I satisfy **OC** and **E**. As in the analysis of **DC** for declaratives, I argue for a unique epistemic condition associated with the force for question-asking— namely, ignorance. Likewise, I argue that taking ignorance as the default-condition for interrogatives allows us to accommodate the various data motivating proponents of the idea that ignorance individuates questions.

²⁶N.B., there is a still an interesting question to develop in these cases: Moorean Paradoxical Sentences are still infelicitous in contexts where the conversational tone is less than knowledge. However, an upshot of the current proposal is that declaratives are Moorean-Paradoxical insofar as the first conjunct is an assertion. To this, I don't have a worked-out answer.

More precisely, following [Hawthorne \(2003\)](#) and [Whitcomb \(2017\)](#), I argue that question-asking, or ‘inquiring’, has a unique epistemic condition:

Ignorance (I): Speakers ask question Q, only if they don’t know the answer(s) to Q.²⁷

Thinking that an epistemic attitude individuates inquisitive force should not be too surprising. If we conceive of discourse as a simple game with the goal of maximizing information, then we should expect the course of conversation to unfold through question and answer pairs (where answers are assertions). As such, we should expect their individuating features to dovetail in opposition: speakers may ask questions in virtue of being ignorant of the answers to their questions, and hearers may provide knowledge of those answers in virtue of asserting them.

Moreover, the types of conversational data that motivate proponents of **KR** are similarly present in motivating ignorance as an individuating feature of question-asking. For instance, [Whitcomb \(2017\)](#) claims that questions like, “Am I the only omniscient being?” are similarly infelicitous as Moorean-sentences like, “It’s raining outside, but I don’t know that it is”. In a manner like **KR**, the **I** predicts the infelicity of questions that presuppose whether the speaker is omniscient. That is, in the capacity of being an all-knowing being, the speaker should know the answer to their question, thus violating **I**. The same explanation is given for the infelicity of other Moorean-Questions like, “Who won the game?... But I know who won the game”, or “I know it is snowing, but is it snowing?”.²⁸ For, asserting an answer represents the speaker as knowing that answer, thus violating **I**.

Adding to the list, **KR** proponents also appeal to conversational data regarding *challengeability*. Many note that it’s natural for hearers to challenge assertions by questioning whether the speaker knows (the content of their assertion). For example, A: “It’s sunny outside.” ... B: “how do you know?”. Likewise, questions can be challenged, or regarded as infelicitous, when hearers reestablish that the speaker knows the answer(s) to their

²⁷As far as I know, the first time someone has formulated a view of this sort is [Hintikka \(1974\)](#).

²⁸The last example of a Moorean-Question was taken from [Whitcomb \(2017\)](#).

question. A: “Who took out the trash?” B: “You know John took it out”. Furthermore, other natural ways to challenge questions are assertions that, under ordinary epistemic standards, license inferences that the speakers know the answer(s) to their own questions: “Who took out the trash”, with “You saw him take out the trash”.

Ultimately, all of the data motivating proponents of **I** can be accommodated by taking ignorance as the **DC** (and thus, **CE**) for interrogatives. Similar to **KR**, the crucial point is that the conversational data motivates **I** insofar as **I** explains why question-askers represent themselves as being ignorant of the answers to their questions. In the same vein, taking ignorance as the default condition for interrogatives provides explanations for why ordinary interrogatives trigger a presumption that the speaker is ignorant.

Now having established a plausible candidate for **CE**, we can characterize a default rule for interrogatives and inquisitive force. Where ϕ represents the content of an interrogative—i.e., a set of propositions—and, $\neg K_s \phi$ represents that the speaker is ignorant of its answers.

$$? : u > \text{Inquire}.\llbracket \phi \rrbracket =_{df} \frac{?:u:\neg K_s \phi}{\text{Inquire}.\llbracket \phi \rrbracket}$$

Now we can satisfy **DC**: the utterance of an interrogative will be defaultly interpreted as inquisitive when addressees can presume that the speaker doesn’t know the answer to the interrogative. Regarding the **OC**, the overriding conditions for $? : u > \text{Inquire}.\llbracket \phi \rrbracket$ obtain when the addressee’s can presume that the speaker is *not* ignorant of the answers to their questions (i.e., speakers know the answers to their question).

Given an account of **OC** for interrogatives and inquisitive force, we can start investigating an answer to **E**. Ultimately, I argue, as in declaratives, speakers can exploit both grammatical and contextual features to indicate or bring about overriding conditions.

4.2.1 Conventionalized Indications of Overriding Conditions

Regarding grammatical means, I argue that *question bias* is best conceived as a mechanism that speakers use to signal that they aren’t completely ignorant of the answers

to their ‘questions’. As such, biased-questions exemplify non-default interrogatives—i.e., speakers represent themselves as being in a position to know the content/answers of their interrogatives—which do not determine genuine inquisitive force.

Question bias is a fairly well studied phenomenon, and it occurs in a variety of forms. The paradigmatic cases of question bias are *negative polar questions*. For instance, consider the difference between a negative polar question, polar question, and a wh/constituent question:

(8) Aren’t you coming to the party?

(9) Are you coming to the party?

(10) Why aren’t you coming to the party?

Notice that (8), a negative polar question, seems to signal that the speaker holds a stronger epistemic position with respect to the relevant answers than (9), a polar question, and (10), a wh-question. In other words, (8) seems to presuppose that the speaker has an epistemic position stronger than ignorance about whether the addressee is in-fact coming to the party. The illocutionary intention seems less about whether the addressee is coming, and more about the speaker *seeking confirmation*.²⁹ Many analyses cash out these difference in terms of the felicity conditions of biased-questions. That is, negative polar questions (and other forms of question bias) are often characterized as requiring either some contextually salient *evidence* or the pretense of established *knowledge*.

All these suggested analyses are supported by a variety of conversational data: (i) biased-questions, and specifically negative polar questions, cannot be followed by overt ascriptions of ignorance; (ii) biased-questions can embed discourse particles which presume some pretense of common knowledge; and (iii) one cannot usually start conversations with biased-questions.

²⁹E.g., See [Ladd \(1981\)](#).

Regarding (i), consider the difference between self-ascribing ignorance with a negative polar question and a polar question:³⁰

(11) I don't know anything about the matter, but I want to know ...

- a. ✓Are you coming to the party?
- b. ✗Aren't you coming to the party?

The difference in felicity conditions is best explained as biased questions require that the speaker is not completely ignorant of the answers to their question. That is, the speaker is epistemically preferential towards one of the two propositions which answers the question. In other words, the biased question depends on some common knowledge regarding the status of whether the addressee is coming to the party.

Furthermore, (ii) biased-questions can embed discourse particles that presume common knowledge; and (iii) one cannot generally start conversations with biased questions.³¹ For instance, consider the following difference between a negative polar questions and a presumed default interrogative.

(12) ✗Who, *of course*, is the lead singer?

(13) ✓Aren't you, *of course*, the lead singer?

The thought is that discourse particles, like “of course”, function as making salient a body of information from which the speaker infers. For example, “Of course Jimmy is coming to the party” is only felicitous insofar as there is some pretense or established knowledge that *Jimmy is coming to the party*. Perhaps, earlier someone said, “Jimmy likes to party”, or it's common knowledge between the participants that Jimmy is a party-goer. So, regarding biased questions, we should expect “of course” to embed, because the relevant inference *is* the biased answer—namely, the addressee is coming to the party.

³⁰This example is adapted from [Asher and Reese \(2005\)](#)

³¹See [Huddleston \(1994\)](#).

The same reasoning explains why biased questions are infelicitous as conversation starters:

(14) [H is new employee.]

- a. ✗Aren't you coming to the party?
- b. ✓Would you like to come to the party?

The thought is that the beginnings of conversations are contexts which have minimal pretense or common knowledge. However, biased questions presume that the speaker is not completely ignorant to the answer of their question—namely, they require some shared common knowledge. Thus, given a minimal context, biased questions create interpretative confusion.

4.2.2 (B) Pragmatic Indications of Overriding Conditions

In addition to grammatical means, overriding conditions can obtain in virtue of contextual features. More precisely, overriding conditions for interrogatives and inquisitive force obtain in virtue of features that represent the participants as having stronger epistemic attitudes/positions than ignorance (towards the answers of their questions).

A lot of early taxonomies of speech acts were careful to distinguish various classes of questions that appear, in some sense, deviant. More specifically, [Searle \(1969\)](#), amongst others, discussed the status of pedagogical or exam questions: questions asked in the context of a classroom setting, where the asker (i.e., a teacher) knows the answers to their questions. Searle is careful to distinguish them from “real questions”, ones that require speaker ignorance: “In real questions S wants to know (find out) the answer; in exam questions, S wants to know if H knows”(Pg. 66).

Now, the present proposal lends support to these past distinctions. Parallel to Searle, it provides an explanatory account for why we think that interrogatives used by teachers in classroom settings are distinct from “real questions”. Namely, they're a type of

non-default interrogatives where over-riding conditions obtain in virtue of the fact that interpreters are aware that the asker knows the content of their interrogative. Moreover, Searle’s characterization of the illocutionary intentions of exam questions seems to track the intentions behind other non-default uses of interrogatives, like biased-questions. That is, in both types of non-default interrogatives the speakers are seeking to coordinate or confirm on what ought to be common knowledge. Viz., non-default interrogatives are useful in coordinating *conversational tone*.

4.3 Default Imperatives

Having extended our analysis to interrogatives, we’ll move onto imperatives. Although, this is trickier for a variety of reasons. First, the meaning or content of imperatives is much more unsettled than interrogatives and declaratives. Second, imperatives exhibit, across languages, vastly more variation than the other sentence types. Lastly, and partly a consequence of the first two points, it’s not obvious what the canonical force associated with imperatives is. Although throughout the paper I have treated the canonical speech act associated with imperatives as *directive force* (i.e., the speaker attempts to direct the hearer to bring about the content of the imperative), imperatives determine a category wider than directive speech: giving permission, advice, wishes, or invitations...

Nonetheless, I parallel [Wilson and Sperber \(1988\)](#) in thinking that the propositional attitude that serves as the default condition for bare imperatives is a complex attitude. The complex attitude is formed from the following: (i) the speaker knows that the addressees *can* bring about the content of the imperative (i.e., $K_s \diamond \phi$).³² And (ii), the speaker desires that the content of the imperative obtains (i.e., $D_s \phi$).

Formulated as a default-rule we get:

$$! : u > Direct. \llbracket \phi \rrbracket =_{df} \frac{! : u : K_s \diamond \phi \wedge D_s \phi}{Direct. \llbracket \phi \rrbracket}$$

³²An upshot of the proposal is that directive force has an inherent modal flavor. Although, I wish to remain neutral on just what precisely is the nature of the modal aspect.

The motivation in thinking that default imperatives require these attitudes (for the interpretation of directive force) comes from the proposal's ability to accommodate the varying types of forces used with imperatives. Stated within the current framework, the varying forces produced with imperatives may be adequately characterized as instances where overriding occurs—namely, non-default imperatives.

More precisely, following [Wilson and Sperber \(1988\)](#), the varying forces can be explained as non-default imperatives where the default conditions do not obtain in the following ways: either (i) one of the basic attitudes is overridden as in the speaker cannot be taken to have them; or (ii) the role of the speaker and the addressee in one of the basic attitudes swaps.

To illustrate, an imperative with permissive force, like “Take a seat!”, may be adequately characterized as a non-default imperative where a swap in the role of the speaker and addressee occurs. That is, as compared to default imperatives (namely, those with directive force), permissive uses of imperatives do not require the speaker to hold a *desire* towards the content of the imperative. Consider the same imperative used with both directive and permissive force:

(15) [H walks into S's office for a quick meeting.]

(16) [S is teaching a 5th grade class, and H keeps getting up out of his seat.]

a. S : “Take a seat!”

The thought is that (15.a) and (16.a) are interpreted with different forces because the shared contextual assumptions make it manifestly obvious whether the speaker desires the content of their imperatives. In other words, in (16.a) it's obvious to the hearer that the speaker desires that the hearer take a seat (in addition to S knowing that H can). Whereas, in (15.a), it's not clear, nor maybe even relevant to the conversation, whether S desires that H takes a seat. Rather, it may be mutually assumed that the potentially relevant desire is had by H—namely, H desires to have a seat. *Viz.*, the desire in (16.a)—the

directive use—is speaker-oriented, whereas the desire in (15.a) is hearer-oriented. Thus, (15.a) is interpreted with permissive force.

Likewise, a similar analysis can be given to account for imperative uses that produce the force associated with wish-giving. For instance, consider imperatives like “Get better soon!” or “Have a good day!”. Both are conventionally interpreted as not carrying directive force. This is easily explained by the fact that their content preempts hearers from assuming that the speaker knows whether the hearer *can* bring about the content. That is, it's outside the control of the hearer whether he could ‘get better soon’ or ‘have a good day’. As such, imperatives linked with the force associated with wish-giving are non-default uses. This is because the speaker cannot be taken to know whether the hearer could carry out the content of the imperative.

Moreover, taking the default conditions for imperatives as a complex attitude containing the speaker’s modal knowledge and a desire allows one to account for a variety of observations on infelicitous use of imperatives. For instance,

✗“Shut the door! You’re not going to shut the door.”[Ninan \(2005\)](#)

✗“Take the A-train. But I don’t want you to do this.”[Kaufmann \(2011\)](#)

✗“Unicorns have never existed, and never will. Bring me a unicorn!”[Starr \(2020\)](#)

Each of these infelicities can be accounted for given that directive force is a default inference from imperatives: these exhibit cases of non-cancellable default inferences. Regarding the first two imperatives, “Shut the door!” and “Take the A-Train” will produce directive force, in the absence of overriding conditions. As a result, the hearers will presume that the speakers hold a complex attitude (i.e., modal knowledge plus desire) towards the content of the imperatives. So, the first two cases are utterances where the latter sentence is inconsistent with the presumed attitudes from the default conditions of the imperative. For example, “But I don’t want you to do this” is inconsistent with interpreting “Take the A-train” with directive force, because the default conditions require

that the speaker desires (or, wants) the content of the imperative while the latter denies it ($D_s\phi \wedge \neg D_s\neg\phi$).

Moving onto conventionalized indications of overriding conditions, recent work suggests that differences in permissive and directive force readings of imperatives can be accounted for semantically. For instance, [Carter \(forthcoming\)](#) highlights the fact that some imperatives, like ‘Do what I say’ and ‘Do what you like’, are normally used with directive and permissive force, respectively. Moreover, Carter provides a variety of tests to distinguish between the two forces. Nonetheless, I argue that the current framework can accommodate both of these observations.

First, it’s no surprise that certain imperatives will prefer permissive readings, given that the default conditions are complex attitudes. Viz., it’s possible (just like hedging with parentheticals) that the content of certain imperatives indicates an attitude weaker than the attitude associated with the default conditions. Thus, imperatives like ‘Do what you desire’ are frequently accompanied with permissive force, because their content overtly indicates that the default desire associated with imperatives is overridden. More specifically, the content of the imperative indicates that the relevant desire is had by the addressee and not the speaker.

Second, the current analysis of imperatives can explain the various tests of forces. For instance, Carter claims that various tag clauses can only be attached to imperatives which prefer permissive readings, but not directive (and, vice versa):³³

(17) ✗Do what I say, I don’t [mind/care/give a shit].

(18) ✓Do what you like, I don’t [mind/care/give a shit].

(19) ✗By all means, do what I say.

(20) ✓By all means, do what you like.

The idea is that the tag-clauses indicate that the speaker is indifferent: the speakers

³³This examples were taken straight from [Carter \(forthcoming\)](#).

don't desire that the task of the imperative obtains. Thus, imperatives which prefer directive readings, like (17) and (19), cannot be appended with these tag-clauses because they are incompatible with the default conditions. However, imperatives that prefer permissive readings are already uses where the default condition of desire doesn't obtain. So, tag-clauses merely amount to reinforcing the permissive reading.

5 The Added Support

Now that I've detailed the default conditions for each sentence-type and force pair, I conclude with some remarks regarding the proposal's advantages. Furthermore, I gesture at further ways to develop the framework.

Regarding the advantages, dissenters of pragmatic approaches, namely [Murray and Starr \(2020\)](#), have argued that the pragmatic linking principles are not obviously grounded in pragmatic-reasoning. For instance, proponents of the dynamic pragmatic approach appeal to linking principles like:

“Given a root sentence *S* whose denotation $[[S]]$ is a proposition, add $[[S]]$ to the common ground”³⁴

Where declaratives clauses are typed (i.e., belong to the declarative sentence-type category) in virtue of having a proposition as its semantic value. Now, the issue is that its not clear how pragmatic reasoning gets one from a type of semantic-content, like propositions, to the force of *adding a proposition to the common ground*. Even more, its not clear why appealing to Gricean-reasoning will ground the following jump in reasoning.

Nevertheless, my proposal addresses these issues. That is, it grounds the pragmatic link between sentence-types and forces by appealing to *default meanings*. Moreover, I've presented and individuated multiple features of default meanings, and how they contrast with other projective content.

³⁴[Roberts \(2018\)](#), who attributes their adaption of the rule from [Zanuttini et al. \(2012\)](#) and [Portner \(2004\)](#)

Additionally, the current proposal need not appeal to ad hoc connections between form and force. That is, extant dynamic pragmatic accounts argue that sentence-types are linked to their respective forces in virtue of their semantic-value or content. Yet, its not clear how semantic objects naturally tend towards specific forces or communicative acts. Given a speech-theoretic approach, the relevant notion linking sentence-types and forces is not *semantic content*, but rather psychological attitudes. Moreover, unlike semantic content there is a direct link, or natural link, between the sentence-types and their forces.

Moving onto another advantage, the current proposal is easily amendable to being developed into a fuller theory of speech-acts. That is, so far the framework has been concerned with *sentential forces*, yet a fuller theory of speech-acts requires the further notion of 'illocutionary force'. For instance, a full analysis of the speech-act of assertion requires more than the condition that the speaker must know the proposition they are proffering. It might also require appealing to various social features, like notions or conditions of commitment or responsibility. Or, in the case of the illocutionary force of commands, one might appeal to a notion like authority.

Nonetheless, it's virtue of the current proposal that it can remain neutral regarding the various social dimensions of illocutionary force, yet it can easily be extended so to include its social dimensions. The idea is that each of sentence-type defaultly represent their speakers as having particular psychological attitudes. Thus, thoroughgoing with this, one may claim that the various social-dimensions of illocutionary forces are a result of applying these features to the relevant psychological attitudes. For instance, default declaratives represent their speakers as knowing the content of their declarative. However, its a further socio-linguistic fact as to the various norms surrounding speakers who represent themselves as having knowledge. For instance, speakers who represent themselves as knowing some content, must be held responsible for the truth of their claims.

To take stock, the foregoing proposal provides a pragmatic account for linking sentence-type and force. I argued that the link is grounded in the pragmatic phenomenon of

default-meanings. Moreover, in taking a speech-theoretic approach, I argued that default conditions are psychological attitudes, which can be modeled as propositional attitudes. Lastly, I argued, on the basis of empirical coverage, that default conditions for each of the basic sentence-types includes an epistemic attitude. Nevertheless, the account is not complete: a fuller account demands the accommodation of variety embedding constructions, indirect speech acts, and a more detailed account of the force associated when overriding conditions obtain. Despite the underdeveloped topics, I hope the current discussion motivates the potential for future developments.

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