The problem with the Frege–Geach problem

Nate Charlow

Abstract I resolve the major challenge to an Expressivist theory of the meaning of normative discourse: the Frege–Geach Problem. Drawing on considerations from the semantics of directive language (e.g., imperatives), I argue that, although certain forms of Expressivism (like Gibbard's) do run into at least one version of the Problem, it is reasonably clear that there is a version of Expressivism that does not.

Keywords Expressivism · Frege–Geach Problem · Negation Problem · Disagreement problem · Imperatives (semantics of) · Allan Gibbard

1 Introduction

This paper offers a solution to the major challenge to Expressivism about normative discourse: the Frege–Geach Problem. Drawing on considerations from the semantics of imperatives, I'll argue that, although certain forms of Expressivism (like Gibbard's) do run into at least one version of the Problem, it is reasonably clear there *is* a version of Expressivism that does not.

The paper's argument is in two parts. **Part One** is *ad personam* (in that it highlights a theoretical tension for exponents of the Frege–Geach Problem). Here I argue that the Frege–Geach Problem is not a problem for Expressivism *per se*, but a "problem" for nonpropositional accounts of certain kinds of language, even certain kinds of language, like imperatives, we have good reason to be Nonpropositionalist about. If the correct account of the semantics of imperatives is nonpropositional, then the Frege–Geach Problem can be overcome. However it is overcome for imperatives, this technique can presumably be extended to declarative normative

N. Charlow (✉)
Department of Philosophy, University of Toronto, 170 St. George Street, Toronto, ON M5R 2M8, USA
e-mail: nate.charlow@gmail.com

sentences. And so there is good reason to think, as R.M. Hare (esp. Hare 1952) once did, that imperatives hold the key to a proper form of noncognitivism about the normative.

This argument is revealing, but ultimately not decisive. The Frege–Geach Problem demonstrates an (alleged) tension between certain theoretical commitments (e.g., familiar constraints of adequacy on a semantic account of inconsistency) and the general sort of semantics available to Expressivists. The above argument shows that imperatives and normative declaratives share semantic features that make nonpropositional accounts of these sentences difficult. Giving up the theoretical commitments that make for the difficulty—that generate the Frege–Geach Problem—is one way to react to this. But this comes at a theoretical cost. Perhaps defending a propositional account of imperatives is warranted after all. Of course, we will have to explain why, for example, imperatives behave differently from declaratives in discourse. But maybe that can be done.

Refuting this sort of position requires either (I) ameliorating the (alleged) theoretical costs of going nonpropositional, or (II) denying that such costs are incurred at all. **Part Two** of this paper's argument represents a preliminary attempt at a strategy of type (II). Here I describe a semantics for imperatives that is (a) independently plausible, (b) nonpropositional, but (c) nevertheless allows us to retain the theoretical commitments that a nonpropositional semantics might seem to force us to relinquish. I indicate how such a semantics for imperatives might be adapted to a nonpropositional semantics for (declarative) normative language. Finally, I argue that this sort of semantics is completely consonant with Expressivism for normative language.

The type of theory I propose here is not defended in any major Expressivist tract. Indeed, I'm convinced the Frege–Geach Problem is a problem for the sorts of theories one finds in those tracts, as all embrace something I reject: a semantics that evaluates sentences relative to states of mind. Nevertheless, I will argue, the kind of account I propose is fully consonant with all of the major motivations Expressivists themselves have cited for their view. Expressivists' trouble with Frege–Geach is, I argue, the result of their assuming an optional commitment about the relationship between theorizing about meaning and theorizing about semantics. Although Expressivism about some kind of language necessarily offers a distinctive *theory of meaning* for that language, there is, I argue, no reason to expect it to offer a distinctive *semantics* for it. Shedding the commitment to an "Expressivist Semantics," as opposed to a relatively standard (albeit nonpropositional) semantics joined to an Expressivist theory of meaning, is key to a proper form of Expressivism for normative language.

2 Expressivism: a précis

This section provides an opinionated overview of Expressivism's central methodological and empirical commitments and motivations. The key Expressivist tenets are that (i) use is fundamental in theorizing about meaning, (ii) the use of normative sentences is to express nonrepresentational attitudes, and (iii) normative sentences have a nonpropositional semantics.

2.1 Expressivism as metatheory: use as explanatory

Expressivism is, in part, a view about linguistic meaning.[1] The central Expressivist thesis about meaning is that use is somehow *fundamental* in theorizing about linguistic meaning. In Gibbard's well-known formulation, we "explain the meaning of a term" by explaining "what states of mind the term is used to express" (Gibbard 2003, pp. 5–6).[2] What is it for a term's use to be "fundamental" in theorizing about linguistic meaning? Here are some options.

Meaning Explains Use? One idea is that if a sentence's use is "fundamental", then a theory of meaning for that sentence must account for its use.

> **Meaning Explains Use (MEU)**
> A theory of meaning for a language $\mathcal{L}$ must explain how sentences of $\mathcal{L}$ are typically used by a competent speaker of $\mathcal{L}$.

According to MEU, theories of meaning for a language that do not explain how sentences of that language are normally used are explanatorily incomplete. To fully explain a term's meaning, we must explain what states of mind the term is used to express.

Alas, MEU is assumed by nearly all theorists of meaning, Expressivist and otherwise, and so is too *weak* to be distinctive of Expressivism. Here is a familiar illustration. In the truth-conditional tradition, propositions are assigned as the semantic values of declarative sentences in order to explain the normal role of such sentences in communication. Declaratives are typically used to describe the world as being one way or another. Propositions represent the world as being some way; they "distinguish among alternative possible ways that things may be" (Stalnaker 1978). In expressing a proposition p—in uttering a sentence whose semantic value is p—a speaker thereby distinguishes alternative possible ways that things may be (p and not-p), and proffers p as a view about how things are.[3] (More on propositions in Sect. 2.3.)

---

[1] On seeing Expressivism as such a view, see, e.g., Rosen (1998); Wedgwood (2007); Schroeder (2008a).

[2] Here and throughout, I will understand the notion *use* as follows: U is a (conventional) use for ϕ iff a speaker (conventionally) expresses U with an utterance of ϕ. U is ϕ's (conventional) use iff (i) U is a use for ϕ, (ii) ϕ has no use besides U. Three notes about this understanding. First, what the notion of conventional expression amounts to is something about which I will say very little here, beyond the fact that (a) it is a conventional, rather than conversationally implicated, relation that (b) holds by default, but defeasibly (cf. Asher and Lascarides 2001). Second, though it is standard for Expressivists to type uses as states of mind, I does not assume this. For all I will say, uses may be typed as proposals to update the conversational scoreboard (Lewis 1979c), speech acts, and so on. Finally, formal objects like propositions can, in a sense, count as uses (since a speaker can conventionally express a proposition in uttering a sentence). But this sense is to be understood as derivative: a speaker expresses a proposition *by* expressing a state of mind or speech act that can be at least partly individuated by its representational content.

[3] A related example: in theorizing about the semantics of interrogatives, partitions of logical space—sets of disjoint, mutually exhaustive propositions—are generally assigned as the semantic values of interrogative sentences (the classic references are Hamblin 1973; Karttunen 1977; Groenendijk and Stokhof 1984). Partitions do not represent the world as being some way, rather they present alternative ways the world might be as candidates for actuality.

So much is standard fare in theorizing about linguistic meaning. Expressivism, however, is non-standard fare. So MEU cannot be characteristic of Expressivism.

Use As Fundamental. A better picture of this commitment is found in these characterizations:

> The centerpiece of any quasi-realist 'account' is what I shall call a psychologistic semantics for the region: a mapping from statements in the area to the mental states they 'express' when uttered sincerely. (Rosen 1998, p. 387)
>
> According to an expressivist account of normative statements, the fundamental explanation of the meaning of normative [sentences] ... is given in terms of the type of *mental state* that the statements made by uttering those sentences *express*. (Wedgwood 2007, p. 35)

Rosen's characterization seems to concern the *kinds* of entities assigned by an Expressivist interpretation of a language, namely, mental states. Which mental states? The ones *expressed* by sentences of that language. An Expressivist account of a language (or fragment thereof) thus consists (at least) in:

–   A formal specification of a relation between sentences and mental states
–   A philosophical understanding of that relation (as expression)

Wedgwood's characterization makes explicit something implicit in Rosen's: Expressivism's *methodological* or *metatheoretical* content. Expressivism about a language is a view about *explanatory priority* in a theory of meaning for that language: we fundamentally explain a sentence's meaning *by* explaining what mental state it is used to express. Explanations of a sentence's meaning that do not bottom out in an expression relation holding between that sentence and some attitude are, on this view, explanatorily incomplete. The sense in which use is fundamental for the Expressivist, then, is explanatory:

> **Fundamental Meaning as Use (FMAU)**
> The fundamental theory of meaning for a language $\mathcal{L}$ is an account of how speakers of $\mathcal{L}$ conventionally use sentences of $\mathcal{L}$ in communication.

What is the relationship between Rosen's and Wedgwood's characterizations? For now we treat them as equivalent. (We'll revisit this later, particularly in Sect. 6.2.)

2.2 Expressivism about the normative: practicality

Beyond metatheory, Expressivism involves a specific kind of view about the meaning of normative language—one with substantial empirical content. Expressivists claim a basic divergence in use (hence meaning) separating descriptive and normative language.

> **Normative Meaning as Practical**
> The conventional use of normative language is (principally) *practical*, while the conventional use of descriptive language is (principally) *representational*.

A state of mind is representational if its function is, roughly, to bear information enabling an agent to *self-locate* in a space of relevant possibilities (cf. Lewis 1979a). Representational states of mind may be said, then, to be *locational* in character. A state of mind is practical if its function is to enable an agent to engage in *planning* (see esp. Gibbard 2003). A practical state of mind enables an agent to order alternative available futures according to desirability, thereby allowing the agent to form intentions (for actions meeting some designated condition concerning the agent's locational information and desirability ranking). Against the information provided by her representational states of mind, practical states of mind furnish the agent with an intentional orientation; a practical state of mind may be said, then, to be *orientational* in character.

Unlike the Expressivist's commitment to FMAU, which is *methodological*, her commitment to the practicality of normative language is obviously *empirical*: it depends on the existence of language whose conventional use is principally practical.

2.3 Nonpropositionalism

Finally, Expressivists reject Propositionalism, a standard commitment of semantics in the truth-conditional tradition.

> **Propositionalism**
> A declarative normative sentence's meaning can be fully represented with a proposition.

Indeed, the Expressivist's other theoretical commitments commit her to this. To see why, it is first important to distinguish two senses of the theoretical notion 'proposition'.

– The **deflationary** (merely **functional**) sense.
– The **inflationary** (**representational**) sense.

Something counts as a proposition in the deflationary sense iff it can serve as the extension of such phrases as 'what Bob thinks' and 'what Sue said'. Something, on the other hand, counts as a proposition in the inflationary or fully representational sense if it *encodes a locational perspective* (e.g., a set of possible worlds). Propositions in the latter sense are the sorts of entities over which probability functions are defined, and which individuate representational states of mind.

If p is (functionally) a proposition, it does not generally follow that p is (representationally) a proposition. A familiar illustration (for others, see Swanson to appear; Yalcin 2011):

(1)   Bob thinks that if Sue comes inside wet, it's raining

Obviously we can say what Bob thinks using an expression of the form *that ϕ*. According to the standard understanding of such attitudes in Bayesian epistemology, however, asserting (1) involves attributing to him a high conditional credence in its raining on Sue coming inside wet. But, as is well-known from Lewis (1976), if *Pr* is a probability function, there is in general no p satisfying:

$$Pr(C|A) = Pr(p)$$

When we specify some thing (that ϕ) that Bob thinks, we leave it open whether this claim's truth-maker is Bob's relationship to the sort of entity—a representational proposition—over which probability functions are generally defined.

The notion of 'proposition' invoked by Propositionalism is inflationary. Why are Expressivists committed to rejecting Propositionalism on this understanding? By Practicality, a normative sentence's use is nonrepresentational. If normative meaning is indeed practical, then the meaning of a normative sentence cannot determine a merely representational use for that sentence (see MEU). But: (i) representational propositions encode a locational perspective, (ii) the state of mind involved in accepting a representational proposition is locational rather than orientational. By accepting a representational proposition, one locates oneself somewhere in the space of relevant possibilities—within the region that corresponds to that proposition (cf. again Lewis 1979a).[4] If Propositionalism is true, and the meaning of a normative sentence is represented with a representational proposition, normative sentences are predicted to have a primarily representational use. This is incompatible with Practicality.

2.4 An illustration: Gibbard's expressivism

On Gibbard's theory of normative content (Gibbard 1990, 2003), the content of any atomic normative sentence (e.g., 'murder is wrong') is a *property of a planning state*, and is represented as a set of pairings of "Hyperplans" and worlds—a **Gibbard Content**. Gibbard Contents represent the state of mind an agent expresses when she utters a sentence. The Gibbard Content of 'murder is wrong' is the set of pairs $\langle \pi, w \rangle$ such that the sentence 'according to π, murder is disallowed' is true at w (Gibbard 2003, Chapters 3–4). Equivalently, the Gibbard Content of 'murder is wrong' is the property a Hyperplan has when it disallows murder.

At first glance, Gibbard's theory might seem to fail to assign mental states as the meanings of normative sentences (Gibbard Contents being the sort of set-theoretic constructions familiar from model-theoretic semantics, rather than attitudes). For Gibbard, however, sets of Hyperplan-world pairs function as a *representations of states of mind* (cf. Schroeder 2008b; Dreier 2006). In the representation of practical states of mind, Hyperplans play a role analogous to that played by possible worlds in the representation of belief. So, as the beliefs of someone who is uncertain about p are often represented with a set of worlds, some of which satisfy p, some of which satisfy $\neg p$, the practical state of mind of someone who is uncertain about whether to do some action in some contingency can be represented with a set of Hyperplans. Representing contents in terms of sets allows the usual Boolean treatment of the connectives: $\wedge$ is associated with $\cap$, $\neg$ with $'$, etc.

But Gibbard is explicit that this Boolean representation is just that: a *representation* of a more fundamental psychological reality, chosen for (i) its

---

[4] Expressivists typically endorse an account of motivation (the Humean Theory) they understand to be incompatible with mental states that are both representational and practical. For classic discussions, see Smith (1987, 1994).

formal well-behaved-ness (i.e., its treatment of contents as elements of a Booelan algebra and connectives as Boolean operations) and (ii) its suitability as a representation of the semantically interesting properties of that fundamental reality:

> One way to think of fact-plan content is to mimic truth functions and quantification... These [mental] operations—combining, ruling out, generalizing—mimic standard logical operations on statements: conjunction, negation, and universal generalization. (2003, p. 54)

Semantic phenomena are thus ultimately explained by characteristics of *representandum* (mental states), rather than of *representans* (Gibbard Contents). The formalism's function is to *elucidate* the recursive nature of psychological space, which is in some sense mirrored by that of a familiar Boolean alegbra. In the end, however, whether the formalism is explanatory depends on whether (i) the representandum is explanatory, (ii) the representans adequately represents the representandum. As we will see later on, it turns out that there is serious reason to doubt both (i) and (ii). The fact that negation expresses a Boolean operation on Gibbard Contents (namely, $'$) does no explanatory work in Gibbard's theory; it is rather the fact that negation expresses the attitude of *ruling out* the attitude expressed by its sentential complement that is explanatory (of, e.g., the inconsistency of ϕ and $\neg\phi$). More on this below.

3 Frege–Geach

[**Note to the reader:** if you are comfortable with your understanding of the Frege–Geach Problem, especially in the guise of the disagreement problem, you may skip to Sect. 4.]

The strongest formulation of the Frege–Geach Problem is found in Schroeder's (2008a, b, c). It is this formulation I structure my discussion around here as I attempt to distill the most compelling version of the Frege–Geach Problem for the type of view described in the prior section.

As a theory of meaning, Expressivism is subject to the usual methodological and theoretical constraints on such theories. For instance:

Compositionality
A theory of meaning for a fragment $\mathcal{L}$ should yield a method of computing the meaning of any well-formed expression α of $\mathcal{L}$, on which that meaning is a function of (i) the meanings of α's constituents and (ii) the mode in which those meanings are combined.

Logicality
A theory of meaning for $\mathcal{L}$ should give rise to satisfactory notions of inconsistency and logical consequence.

Compositionality speaks for itself. As for Logicality, a theory of meaning should predict, for any ϕ of $\mathcal{L}$, that ϕ stands in the inconsistency and consequence relations in which we know it to stand (**Weak Logicality**). More strongly, this prediction must be

generated *in a theoretically satisfactory way* (**Strong Logicality**); more on this below. When someone claims Expressivism has a (Frege–Geach) problem, they generally mean that Expressivism has trouble meeting any or all of (Compositionality, Weak Logicality, Strong Logicality) in accounting for the meaning of constructions embedding normative syntax in unasserted environments (under negation, conditional antecedents, . . .).

Although early versions of the Frege–Geach Problem focused mainly on challenges arising from Compositionality and Weak Logicality, these are ultimately less troubling than sometimes thought; indeed it is easy to see that, e.g., Gibbard's Expressivist semantics satisfies both (for discussion, see Schroeder 2008c). If $[\![\phi]\!]$ is the Gibbard Content for ϕ:

– ϕ and ψ are **Gibbard-Inconsistent** iff $[\![\phi]\!] \cap [\![\psi]\!] = \emptyset$.
– An argument $\phi_1, \ldots, \phi_n / \psi$ is **Gibbard-Valid** iff $[\![\phi_1]\!] \cap \ldots \cap [\![\phi_n]\!] \subseteq [\![\psi]\!]$.

The reader familiar with, e.g., possible worlds semantics will recognize that there is nothing special about these definitions at all: Gibbard-inconsistency is defined *exactly* as inconsistency is standardly defined in any semantics that assigns sentences elements of a Boolean algebra as semantic values.

The challenge from Strong Logicality is that an Expressivist treatment of inconsistency and consequence, even if formally adequate, seems doomed to be theoretically or explanatorily deficient (Dreier 2006, 2009; Schroeder 2008a,b,c; Unwin 1999, 2001).

Here is Schroeder's (2008b) illustration of the problem. Schroeder invites us to consider the pairs in (2) and (3).

(2)   a.   One should commit murder $\approx O\phi$

     b.   It's not the case that one should commit murder $\approx \neg O\phi$

(3)   a.   One shouldn't commit murder $\approx O\neg\phi$

     b.   It's not the case that one shouldn't commit murder $\approx \neg O\neg\phi$

Two things obviously hold for each pair:

– One item of the pair is *inconsistent with* the other; e.g. (2a) and (2b) are inconsistent
– An agent who asserts one item of the pair disagrees with an agent who asserts the other; e.g., an agent who asserts (2a) is disagreeing with an agent who asserts (2b)

It is a natural move to explain the latter fact in terms of the former: agents disagree when they assert inconsistent things. Inconsistency is, presumably, a semantic fact. How is it to be explained? For the Expressivist, Schroeder suggests, the explanation must be stated in terms of the properties of the attitudes the relevant sentences express. What attitudes do sentences (2a) and (2b) express? Schroeder suggests two possibilities. Let's consider these in turn.

Same Attitudes. According to the Same Attitude Analysis:

Same Attitude Analysis (SAA)
$O\phi$ and $\neg O\phi$ express the *same attitude* (toward inconsistent contents)

On the SAA, it's natural to say that (2b) and (2a) express the same attitude, toward inconsistent contents; likewise for (3a) and (3b). This may be turned into an account of inconsistency by supposing the attitude expressed is (in Schroeder's terminology) *inconsistency-transmitting*.

Inconsistency-Transmitting Attitudes
A propositional attitude A is inconsistency-transmitting iff bearing A toward inconsistent contents is itself inconsistent.

On the SAA, the inconsistency of (2a) and (2b) is thus explained by the fact that (2a) and (2b) express an inconsistency-transmitting attitude A toward inconsistent contents.

As Schroeder notes, however, there is a deep problem with the SAA: given natural assumptions, it predicts (2b) and (3b) inconsistent (cf. Schroeder 2008b, p. 579).[5] That, of course, is the wrong prediction. Obviously, (2b) and (3b) are themselves logically consistent: $\neg O\phi$ and $\neg O\neg\phi$ are deontically equivalent (assuming the duality of obligation and permission), respectively, to $P\neg\phi$ and $P\phi$. These sentences together say that both $\neg\phi$ and ϕ are allowed: there is no obligation one way or the other. Although murder, of course, is not generally *optional* in this sense, many things are. According to the version of the SAA in question, this is impossible.

Different Attitudes. According to the Different Attitude Analysis:

Different Attitude Analysis (DAA)
$O\phi$ and $\neg O\phi$ express *distinct attitudes* (perhaps toward the same content).

According to DAA, (2b) and (2a) express *distinct attitudes* (towards, perhaps, the same content). While (2a) expresses, perhaps, disapproval of non-murder, (2b) expresses, perhaps, the attitude of tolerating non-murder. (2b) and (3b) are consistent because the former expresses the attitude of tolerating non-murder, while the latter expresses the attitude of tolerating murder; such attitudes are obviously consistent.

But *what* is inconsistent about disapproving and tolerating non-murder? There is not a single inconsistency-transmitting attitude here, to whose constitutive norm the Expressivist can appeal to explain its inconsistency-transmitting-ness. The DAA must, it seems, *stipulate* rational norms on which it is inconsistent to disapprove and

---

[5] *Proof* By the SAA, (2a) and (2b) must express A toward inconsistent contents (respectively: ϕ and some ψ such that $\phi, \psi \models \bot$). Similarly, (3a) and (3b) must too (respectively: $\neg\phi$ and some χ such that $\neg\phi, \chi \models \bot$). Since $\phi, \psi \models \bot$, it follows that $\psi \models \neg\phi$. And since $\neg\phi, \chi \models \bot$, it follows that $\chi \models \phi$. Whence it follows that $\psi, \chi \models \bot$. That is to say, ψ and χ are inconsistent. So, since A is inconsistency-transmitting, bearing A toward ψ and χ is inconsistent. Therefore, since (2b) expresses A toward ψ and (3b) expresses A toward χ, (2b) and (3b) are inconsistent.

The way to block this argument, while still holding onto a version of the SAA, is to suppose that the contents of the attitudes expressed by (2a) and (3a) are not inconsistent. Indeed, Schroeder (2008a) suggests an Expressivist semantics—a "Being For" semantics—that does exactly that. I will not be interested in this response here. As Schroeder (2008a) discusses in detail, it runs into empirical difficulties. Thankfully, given its technical complexity, this dialectic is irrelevant, since I reject the pressures that would lead an Expressivist down this road.

tolerate ϕ. But, remarks Schroeder, the Expressivist is not entitled to assume the existence of such norms. In contrast with the case of rational norms regulating, e.g., an agent's beliefs, there are "few good examples" of rational norms requiring any relation between "logically unrelated" attitudes (like disapproval and toleration) (2008b, p. 581).

Perhaps contrary to appearances, Gibbard's account is a version of the DAA (and, as such, encounters difficulties with Strong Logicality). According to Gibbard's semantics:

– (2a) expresses a state of planning to murder. This state is represented with the Gibbard Content $[\![O\phi]\!]$, the set of Hyperplan-world pairs $\langle \pi, w \rangle$ such that π requires murder at w.
– (2b) expresses a state of disagreeing with planning to murder. Since $\neg$ expresses $'$, this state is represented with the complement of the Gibbard Content $[\![O\phi]\!]$, i.e., $[\![O\phi]\!]'$.

By definition, the state of mind [planning to murder while disagreeing with planning to murder] cannot be represented with a Gibbard Content (since their associated Gibbard Contents are, by stipulation, disjoint). So, by definition, $O\phi$ and $\neg O\phi$ are Gibbard-Inconsistent.

But Gibbard's account leaves something important unexplained (cf., again, Dreier 2006, 2009; Schroeder 2008b). Consider an element of the set $[\![O\phi]\!]'$. Given what we know about the state of mind expressed by $\neg O\phi$, it must be a pair $\langle \pi, w \rangle$ such that π (expressly) tolerates murder at w (cf. Dreier 2006). Why does it not belong in $[\![O\phi]\!]$? (Equivalently, why is there no $\langle \pi, w \rangle$ such that π both tolerates and disallows murder at w?) There are two possibilities, neither satisfactory.

– These properties are not co-instantiable. (But, of course, they are; plans are often inconsistent.)
– These properties are not *rationally* co-instantiable in a plan. (But this begs the question!)

This is, for now, just a thumbnail sketch of the major case against the DAA (with at least one rather important sleight of hand). I will return to the disagreement problem below.[6]

Signpost. The most serious version of the Frege–Geach Problem stems from the apparent gap between canonical modes of semantic explanation and the modes of semantic explanation available to Expressivists. Expressivists thus confront a dilemma: relinquish attachment to the sorts of theoretical constraints imposed by Strong Logicality, or jettison the modes of semantic explanation which your theory makes available to you (thereby jettisoning Expressivism).

---

[6] Although I think Schroeder's criticism of Gibbard is broadly correct, I should note that it has lately come in for criticism from Silk (2013) (who argues, in effect, that disapproval and toleration *are* logically related).

4 A dilemma

In this section, I turn the tables on fans of this argument. If one thinks Strong Logicality generates a disagreement problem for Expressivism, one should think Strong Logicality generates a similar problem for Nonpropositionalism about imperatives. But there are good reasons, having nothing to do with Expressivism, for Nonpropositionalism about imperatives. This presents opponents of Expressivism with a dilemma: give up Nonpropositionalism for imperatives, or admit there is something defective about an argument against Expressivism built on Strong Logicality.

4.1 Nonpropositionalism about directives

I begin by sketching the most developed version of Nonpropositionalism about imperative language found in the empirical literature, Paul Portner's. Portner (2004, 2007) has constructed an influential account of the meaning of imperatives like (4)—what might plausibly be termed an Expressivist account of imperative meaning—around three central claims.[7]

(4)   Shut the window!

Claim 1   Linguistic work on the relationship between clause-type and use suggests something like a conventionalized use associated with certain, universally realized clause-types (the more accurate linguistic stand-in for the philosophers' notion "mood") (Sadock and Zwicky 1985; Portner 2004). I don't want to rely on the conventionalization claim here. Instead, let us recognize that clausal tokens of clause-types are associated with a *default* use (where a default use is one the sentence is interpreted to have in normal, discourse-initial cases).

On the doctrine in question, clausal tokens of clause-types have their default uses in virtue of (i) their clause-type and (ii) the "propositional" content to which the clause-type (or mood) is directed. (4) functions, by default, to cause an addressee to plan to shut the window. (5) functions, by default, to cause an addressee to accept the proposition that the window is shut. (6) functions, by default, to cause an addressee see the issue represented by the partition {that the window is shut, that the window is not shut} as a salient issue.[8]

(5)   The window is shut
(6)   Is the window shut?

Generalizing this claim, we have:

---

[7] Portner builds on Lewis' (1979b) classic account, although there are important differences. For other accounts that agree with Portner on at least Claims 1–2, see Charlow (2010, 2011); Mastop (2005, 2012); Starr (2011). The differences between these accounts are not relevant for my purposes here. Portner's account is chosen simply as an illustrative example.

[8] In addition to the work cited above, see Hare (1952); Stenius (1967); Dummett (1973); Lewis (1970); Wittgenstein (1958); Zimmerman (1980).

Default Use
Sentences have a default use (discourse role, illocutionary force, etc.), which they have in virtue of their *clause-type* (declarative, interrogative, or imperative).

The nature of a sentence's default use is generally recognized to constrain semantic theorizing about it, a commitment reflected in MEU. Whatever semantics we give for imperatives, then, must comport with their default use. More positively, theorizing about the semantics of imperatives may begin by examining the character of their default uses. This leads into Portner's second central claim.

Claim 2 The default use of an imperative of the form !ϕ is to alter an addressee's plans, so that the addressee plans to see to it that ϕ. In other words, it seems plausible that:

Imperatives are Used Non-Representationally
The default use of imperatives is to *introduce planning requirements* on an addressee. This may be modeled as addition to a contextual parameter that determines what she ought (in view of her plans) to do (her "To-Do List").

In accepting an imperative, an addressee does not come to *represent* the world as being some way. The essential effect of an imperative is to alter the addressee's plans, rather than her beliefs. (More on the mechanics of Portner's account in Sect. 4.2.2.)

Portner develops a nonrepresentational account against Modal Accounts of imperative meaning, which identify an imperative !ϕ's semantic value with that of a corresponding modal sentence—roughly *you must see to it that ϕ*.[9] More generally, though, such accounts stand in opposition to any account which assigns entities understood to have a representational function (propositions) as an imperative's semantic value.[10] Such accounts face a major difficulty: explaining why, if an imperative's semantic value is such an entity, its use is *performative* (requirement-creating), rather than representational. Why, if imperatives have propositions as their semantic values, is coming to accept an imperative a matter of adjusting an orientational, rather than locational, perspective?

A tacit commitment to this sort of connection between semantic types (propositions) and cognitive functions (representation) is, I conjecture, the central reason most of us are loath to think imperatives might have propositions as their semantic values. The truism underlying our aversion to a propositional semantics for imperatives is, plausibly, just this: if imperatives had a propositional semantics, we would expect them to have a representational function.

---

[9] For versions of the modal view, see Aloni (2007), Åqvist (1964), Han (1998), Schwager (2006).

[10] There are many accounts that fit this bill. For instance, some accounts analyze imperatives with explicit performatives (!$\phi \approx$ *I command you to see to it that ϕ*) and assign the latter satisfaction conditions (Lewis 1970). Others analyze them in terms of future-tense indicatives (!$\phi \approx$ *you'll do x*) (Geach 1958). Still others say the semantic value of !ϕ is its fulfillment-condition (i.e., the proposition that ϕ) (Jørgensen 1937–1938; Hare 1952, 1967; Bennett 1970).

It is, I've stressed, possible to reject the link between semantics and use invoked here. Maybe imperatives have a propositional semantics, despite having a paradigmatically nonrepresentational use? Perhaps there is reason to be suspicious of this inference?

1. The use of imperative language is nonrepresentational.
2. So, imperative language has a nonpropositional semantics.

Anything is possible! As I've emphasized, however, this would force a pretty fundamental revision in our thinking about the relationship between semantics and functional potential. Ceteris paribus, we are unhappy with propositional semantics for interrogatives. Ceteris paribus, we should also be unhappy with propositional semantics for imperatives.

Claim 3 It is the third claim of Portner's that makes his account Expressivist. Portner is dubious of the explanatory claims of Modal Accounts of imperatives:

> [O]nce we have come to understand what the performative use accomplishes over and above the truth-conditional semantics of the modal, we see that this additional meaning is just what we need in order to analyze imperatives... [I]t is not helpful to analyze imperatives as modal sentences which only have a performative use. A modal which only had a performative use might as well not be called a modal at all. The performative aspect of its meaning, modeled as the addition of its prejacent to the To-Do List or in some other way, would explain everything that needs to be explained about its meaning. (Portner 2007, pp. 363–366)

Distilled, Portner's claim here is something like:

Imperative Meaning as Use (IMAU)
A theory of imperative meaning is a theory of default use. An account of an imperative's default use explains "everything that needs to be explained about its meaning" (2007, p. 366).

I do not know whether Portner himself subscribes to a version of FMAU. But IMAU is roughly what you get by instantiating FMAU for imperatives. For Portner, the fundamental theory of meaning for imperatives is an account of how speakers conventionally use them in communication.

In sum. The "going" theory of imperative meaning, Portner's, is an Expressivist theory. Portner endorses a FMAU claim for imperatives, claims the conventional use of imperative use is performative (rather than representational), and rejects Propositionalism for imperative sentences.

4.2 Disagreement problems for directive language

Here I argue that the disagreement problem sketched for Expressivism about normative language arises for Portner's version of Expressivism about imperative language. So much the worse for Expressivism, even about imperatives, then? That is too quick. As I will also argue, assuming MEU, the disagreement problem *also*

arises for the bare conjunction of Claim 1 (Default Use) to Claim 2 (Nonrepresentational Use)—even, that's to say, for bare Nonpropositionalism for imperatives.

4.2.1 Problems for imperative expressivism

By loading all of an imperative's meaning into its use, Portner would seem to face a challenge directly parallel to the negation problem for Expressivism. An imperative of the form $!\phi$ is *inconsistent* with a contrary grant of permission of the form $¡\neg\phi$. The following sentences, for instance, are pairwise inconsistent.

(7)   a.   Do not jaywalk!

     b.   You may jaywalk

(8)   a.   Do not have an apple!

     b.   Have an apple! [*permission imperative*; Portner (2010)]

Such inconsistency does not differ starkly from the sort of inconsistency exhibited by sentences of the form $O\phi$ and $\neg O\phi$.[11]

– Anyone who issues them (e.g., a judge or parent) is correctly charged with inconsistency.
– Anyone who accepts them (by which I do *not* mean they come to *believe* they are binding, rather, they adjust their plans accordingly) is correctly charged with inconsistency.
– Someone who issues one disagrees with someone who issues the other. The former disagrees with the latter about what the speaker is to do.

It seems overwhelmingly plausible that such facts about imperatives and "contrary" permissions should have a semantic origin. Here we apparently have genuinely logical, as opposed to merely "pragmatic," inconsistency (e.g., the sort of inconsistency afflicting someone who accepts a Moore-Paradoxical sentence) (on the importance of this distinction, see van Roojen 1996).

In view of her commitment to IMAU, the onus would seem to be on the imperative Expressivist to explain the inconsistency of $!\phi$ and $¡\neg\phi$ *in terms of properties of their associated performative uses* (i.e., their associated discourse roles or speech acts). There are two possibilities:

– **Same Speech Act Analysis**
  $!\phi$ and $¡\neg\phi$ express a single inconsistency-transmitting speech act (toward inconsistent contents)

---

[11] Something that might make us wary of my claim here is the fact that the imperative is of a different clause-type than the permission-grant (which is declarative). It should not. It does seem clear that the English imperative *don't jaywalk* is inconsistent with the English permission-grant *you may jaywalk*. It is, moreover, easy to imagine a language with a single, "directive" clause-type, which permitted canonical formations of both commands and permission-grants, with sentences of respective forms $!\phi$ and $¡\phi$ (Lewis 1979b, see, e.g., the language defined in).

- **Different Speech Act Analysis**

  !ϕ and ¡¬ϕ express distinct speech acts (commanding and permitting, perhaps[12])

Each way, the imperative Expressivist faces precisely the problem faced by the Expressivist about normative discourse. Setting aside the Same Speech Act Analysis (which, it's fair to say, is a non-starter), let's try to be more concrete about the problem.

4.2.2 A bit more carefully...

The core fact around which Portner builds his account is the paradigmatically non-representational function of imperatives: the "canonical discourse function" (henceforth CDF) of an imperative !ϕ is to add the proposition[13] that ϕ to an addressee's To-Do List, yielding a To-Do List which tends to require (I'll hereafter drop the "tends to") that the addressee select actions leading to ϕ's realization (Portner 2007, pp. 357-358). *Whatever* the CDF of a permission ¡ϕ is, something notoriously difficult to describe (see Lewis 1979b; van Rooy 2000), it will involve *some* sort of modification to the addressee's To-Do List, one presumably yielding a To-Do List tending to permit the addressee to select actions leading to ϕ. Here we have (at least the beginnings of) a recognizably Expressivist theory of meaning about imperatives and permissions. What can it tell us about the inconsistency about an imperative !ϕ and a contrary permission ¡¬ϕ?

The following answer seems appealing. Presumably the operation of modifying a To-Do List so that ϕ is required is supposed to be inconsistent with the operation of modifying a To-Do List so that ¬ϕ is permitted. Well, why is that? What is inconsistent about such operations? One answer—that speakers who express such operations in a single discourse are *themselves* inconsistent—obviously gets us nowhere.

A better answer: such operations *enforce inconsistent properties* on a To-Do List; no consistent To-Do List both requires ϕ and permits ¬ϕ. We might imagine an imperative !ϕ characterizing the property a To-Do List has when it requires ϕ (equivalently, the set of To-Do Lists requiring ϕ), a permission ¡¬ϕ characterizing the property a To-Do List has when it permits ¬ϕ (the set of To-Do Lists permitting ϕ). In other words, we might imagine imperatives and permissions characterizing, roughly, *Gibbard Contents*, notated respectively as $[\![!\phi]\!]$ and $[\![¡¬\phi]\!]$. An imperative !ϕ and a contrary permission ¡¬ϕ, we might say, characterize Gibbard Contents whose intersection is empty. And therein lies their inconsistency. The envisioned explanatory chain looks something like this:

$$[\![!\phi]\!] \cap [\![¡¬\phi]\!] = \emptyset$$

$\rightarrow$ The CDF of !ϕ is to enforce a property on a To-Do List that is inconsistent with the property whose CDF it is for ¡¬ϕ to enforce
$\rightarrow$!ϕ and ¡¬ϕ are inconsistent

---

[12] If we model commanding in terms of some sort of Boolean operation on plans (e.g., addition to the To-Do List, or restriction of the "permissibility sphere" to worlds where the command is satisfied), commanding and permitting are notoriously non-inter-definable; see Lewis (1979b) for discussion.

[13] Portner actually says it is *properties* that are added. This is a wrinkle we can ignore.

Such an explanation leaves much to be desired. Its first step is no more well-founded than the analogous step in the Expressivist's attempted explanation of why no evaluative perspective decided on ϕ also tolerates $\neg\phi$. What would be inconsistent about a To-Do List that both required (was decided on) ϕ and permitted (tolerated) $\neg\phi$? It would seem that any answer to this question would suffice to resolve the disagreement problem for Expressivism about normative language. And so the Frege–Geach Problem arises for Portner's version of Expressivism for imperative language.

4.2.3 Problems for imperative nonpropositionalism

So much the worse, perhaps, for Expressivism about imperatives? Actually, the disagreement problem in question plausibly has nothing to do with the Express-ivistic component of Portner's account. Instead, it has everything to do with its *Nonpropositionalism*.

If Portner is right that the CDF of an imperative is nonrepresentational, we have reason to prefer a nonpropositional semantics. What kind of nonpropositional semantics? One which explains why $!\phi$ and $\mathrm{i}\neg\phi$ are inconsistent, of course. But *also* one which explains why $!\phi$ and $\mathrm{i}\neg\phi$ have the nonrepresentational uses they, as a matter of linguistic fact, have.

What sort of semantic object, then, should be assigned as the semantic value of the imperative $!\phi$? We need not, at this point, be specific. But plausibly, at least, it should be a set of objects that somehow characterize, perhaps together with pragmatic or rational "axioms" linking semantic objects to cognitive information, the property a To-Do List or plan has when it requires or is decided on ϕ. Similarly, when ϕ is descriptive, we say that the semantic value of ϕ should be a set of objects—standardly, possible worlds—that somehow characterize the property a representational information state has when it accepts the locational information expressed by ϕ; in the simplest case, this is a matter of all the worlds compatible with one's information being worlds at which ϕ holds. Most generally, the semantic value of any sentence should be a set of objects that somehow characterize the property a *cognitive parameter* has when it accepts the content of that sentence.

So, at the highest level of abstraction, the set of objects assigned as the semantic value of the imperative $!\phi$ should be a set of objects that provide (or can be used to provide) a positive answer to the question *is the plan decided on ϕ*?; similarly, the semantic value of a permission $\mathrm{i}\phi$ should be a set of objects providing a positive answer to the question *does the plan permit or tolerate ϕ*?

Supposing we develop a semantics around this sort of idea, assigning disjoint sets of objects to an imperative and its contrary permission.[14] The question arises: why is there no object π such that π is compatible with the semantic value of $!\phi$ and the semantic value of $\mathrm{i}\neg\phi$; why are they disjoint? The best answer seems to be: if π were compatible with both the semantic values of $!\phi$ and $\mathrm{i}\neg\phi$, π would tell us that ϕ is

---

[14] There are other semantics for imperatives/permissions that are consistent with this. Starr (2011), for instance, takes this to motivate an update semantics for imperatives. The dialectic for such theories will be basically the same as for the static view that I entertain here. For discussion, see my (to appear).

decided on and $\neg\phi$ tolerated. And there is no such π. But why is there no such π? There are two possibilities, neither satisfactory.

– These properties (the property π has when, according to π, ϕ is planned and $\neg\phi$ tolerated) are not co-instantiable. (But, plausibly, they are!)
– These properties are not *rationally* co-instantiable. (But this begs the question!)

Something seems to have gone wrong. Of course $!\phi$ and $\mathbf{\mathrm{i}}\neg\phi$ are logically inconsistent. But when we try to account for this inconsistency in the standard way—not relying at all on the sorts of controversial methodological claims associated with Expressivism, instead relying only on the tried-and-true approach to semantic theorizing on which semantic values are assigned so that they comport with sentences' manifest default uses—we run headlong into the disagreement problem.

4.2.4 A reply

A natural line of reply is this.[15] Since she endorses MEU and Portner's Claims 1–2 (but not his Claim 3), the fan of Imperative Nonpropositionalism, unlike the Imperative Expressivist, does not commit herself to a semantics *of attitudes* or *of speech acts*. She commits herself only to a semantics that yields empirically correct predictions about the semantic characteristics imperatives actually exhibit—a semantics that in view of MEU and Portner's Claims 1–2 is one on which imperatives and permissions semantically express sets of plans. Since $!\phi$ and $\mathbf{\mathrm{i}}\neg\phi$ are logically inconsistent, it is simply an empirical fact that $[\![!\phi]\!]$ and $[\![\mathbf{\mathrm{i}}\neg\phi]\!]$ must be disjoint. If we like, we can motivate this compositionally by letting $!$ and $\mathbf{\mathrm{i}}$ function like duals, so that $\mathbf{\mathrm{i}} := \neg!\neg$, and appealing to the baseline empirical fact that $\neg$ expresses Boolean complementation, so that this disjointness is *derived* as a prediction of the semantics.[16] Beyond this, what is there to be said?

Plenty. There remains an underlying question that the view under consideration does not answer. We can, without contradiction, describe (if you prefer, regard as actual) a plan that "satisfies" (i.e., meets the condition expressed by) both $!\phi$ and $\mathbf{\mathrm{i}}\neg\phi$ (supposing, as Portner's Claims 1–2 together with MEU seem to require, that $!\phi$ and $\mathbf{\mathrm{i}}\neg\phi$ semantically characterize properties of plans). Such a plan is at least logically possible. However, we cannot, without contradiction, describe (regard as actual) a possible world that satisfies ϕ and $\neg\phi$ (where ϕ is something whose truth is only world-relative).

Of course, given a *stipulation* that $\neg$ expresses Boolean complementation, it is contradictory to suppose there is an evaluative perspective in both $[\![!\phi]\!]$ and $[\![\neg!\phi]\!]$. This, I think, is not enough. For it remains a mystery *what* is inconsistent about a plan that "satisfies" both $!\phi$ and $\neg!\phi$. We can, after all, describe such a plan without

---

[15] My reply draws on my understanding of Dreier (2009)'s understanding of the disagreement problem.

[16] On the view under consideration, $\neg$ expresses an operation that can apply not only to propositions, but arbitrary sets of objects. There is no reason, from the point of view of the semantics, to forbid $\neg$ from scoping over an imperative. For purposes of this discussion, I will suppose that this view makes sense.

contradiction. There is no similar mystery about what is inconsistent about a possible world that satisfies ϕ and $\neg\phi$.

At bottom, this worry concerns whether a fan of Imperative Nonpropositionalism is entitled to assign Boolean complementation at the meaning of $\neg$. Propositionalists about a sentence type T—those who think the satisfaction of T-sentences is only world-relative—are clearly entitled to assign Boolean complementation as the meaning of $\neg$. Doing so allows us the derivation of contradictions in the theoretical metalanguage, which the Propositionalist about T-sentences thinks would *actually obtain* if the satisfaction conditions of a T-sentence and its negation were met.

We are not similarly entitled to assign Boolean complementation as the meaning of $\neg$ when $\neg$ scopes over a sentence ψ that expresses a condition on a plan (and $\neg\psi$ expresses a condition on a plan too): doing so allows us to derive the desired contradictions in the metalanguage, which is nice, but we have no reason to think such a contradiction actually obtains if the satisfaction conditions of ψ and $\neg\psi$ are both met. The metalanguage is, for all this semantics says, potentially *misrepresenting* the facts that obtain on the ground of the model theory. This version of the disagreement problem obviously applies to Imperative Nonpropositionalism as much as it does to Imperative Expressivism, insofar as both utilize sets, or characteristics, of plans in giving a semantics of imperatives.

4.3 Upshot

Suppose we take all of this to show that the relationship between semantics and default use is more fraught than we had originally suspected. Suppose we treat this sort of argument as uncovering a reason about being suspicious of the inference:

1. The use of imperative language is nonrepresentational.
2. So, imperatives have a nonpropositional semantics.

A proponent of the disagreement problem might try this sort of reply to defend against the charge that her view could be used to show something that is clearly false: that imperative language's default use is representational.[17] On this way of thinking, it is possible to retain a propositional semantics for imperatives, even while denying that imperatives are representationally.

The force of this reply is limited. Nonpropositionalism, I've argued, has a strong claim to being the correct view about the semantics of imperatives. It is a prima facie unattractive theory that explains the distinctive, nonrepresentational use of imperatives in terms of, say, pragmatic devices (like implicatures) unmoored from their semantics. We are, with good reason, loath to think imperatives might have propositions as their semantic values. If imperatives had a propositional semantics, we would expect them to have a representational use.

---

[17] A related worry: what kind of use a certain kind of language has, by default, is a question for *empirical* linguistics. But the considerations the proponent of the disagreement problem uses to motivate propositional semantics are wholly a priori. Since the connection between a propositional semantics and a representational use is plausibly a priori (see, e.g., Burge 1993), the disagreement problem appears to furnish a way of making empirical "discoveries" about language a priori. Obviously, it does no such thing.

This sort of view is widely shared, but not decisive; at bottom, the argument is *ad personam*. While it would be surprising, especially for proponents of the disagreement problem, if a propositional semantics for imperatives were required, expectations are not necessarily a reliable guide to linguistic truth. Perhaps the lesson here is that we should be cautious about inferring semantic facts from facts about use.

The most definite take-away point is this: the Frege–Geach "Problem", under the guise of the disagreement problem, has little to do with Expressivism *per se*. Indeed, it seems to afflict any Nonpropositional semantics—i.e., a semantics for sentences of type *T* that, in accordance with MEU, assigns sets of objects as the semantic values of *T*-sentences, that can, without contradiction, exhibit a certain type of gross inconsistency. For most of us, this will seem a serious cost of taking the Frege–Geach "Problem" seriously. But mileage may vary.

5 Onward

Putting Nonpropositionalism on more solid ground requires either (I) ameliorating the (alleged) theoretical costs of going nonpropositional, or (II) denying such costs are incurred at all. I am not interested in a strategy of type (I). Instead, I will try (a) to briefly describe a nonpropositional semantics for imperatives that allows us to give a fully canonical account of inconsistency for an imperative fragment, (b) to indicate how such a semantics for imperatives might be adapted to a nonpropositional semantics for (declarative) normative language.

Does this sort of semantics have a claim to the mantle of Expressivism? Yes, I'll argue. It is fully consonant with—indeed, inspired by—the major motivations and commitments of Expressivism. Frege–Geach is, to be sure, a real problem for extant forms of Expressivism. But extant forms of Expressivism are, I'll suggest, the result of their assuming an optional commitment to what Rosen termed a "psychologistic semantics". Shedding this commitment is key to a proper form Expressivism for normative language.

5.1 Preliminaries to a semantics for imperatives and permissions

The semantics for imperative and permission sentences I state in this section will build on the following very basic idea: we should understand notions like *being decided on*, *requiring*, *being tolerant of*, and *allowing*—the critical notions of the semantic metalanguage spoken by the Nonpropositionalist for imperatives—in *modal terms*. Treat *being decided on* as $\Box$, *being tolerant of* as $\Diamond$. The desired logical characteristics of these notions can thus, I'll argue, be had for free.

Such an idea, taken by itself, is in no way novel: treating such notions as having modal content is an idea as old as modal logic itself and undergirds a considerable amount of work in natural language semantics.[18] But its implications for the sorts of questions with which we have been preoccupied have gone unremarked.

---

[18] The locus classicus of which is Angelika Kratzer's work on the semantics of natural language modals in the late 1970s and early 1980s, especially Kratzer (1977, 1981).

I would like to flag one such implication up front. Taking this suggestion seriously requires—unless we propose to rewrite the semantics of modal notions and languages from the ground up, and I do not—abandoning the idea that the semantic entities relative to which the sentences in question are evaluated are *psychological* in nature. Modal notions are standardly interpreted relative to *formal* objects—domains of quantification (or pairs, triples, ..., of objects precisely characterizing such domains)—typed as set-theoretic constructions out of possible worlds models. That is a lot of jargon, but suffice it to say that such objects, whatever they are, are not psychological.

5.2 A general semantics

To formulate a semantics accounting for the characteristic use of imperatives and permissions, it would be nice to follow the broadly Portner-ian (also, Gibbard-ian) idea that the semantic function of an imperative is to *partition planning space*. In other words, to say that $!\phi$ expresses a property of plans—that it encodes an orientational perspective. Which property? Following Portner's lead, let's say the property a plan has if it requires (is decided on) ϕ. Similarly, $¡\neg\phi$ expresses the property a plan has when it permits (is tolerant of) $\neg\phi$.

But didn't this way of designing the semantics get us into trouble? It did. We could not say what was inconsistent about a plan that was decided on ϕ and tolerant of $\neg\phi$.

I am with the opponents of Expressivism in thinking this shows it is mistaken to think that:

– Psychological states (like human plans, preferences, states of (dis)approval) are the semantic entities relative to which such sentences are evaluated (for truth or acceptance or whatever one's favorite semantic primitive happens to be).
– The semantic value of an imperative or permission sentence is the set of psychological states relative to which that sentence is evaluated as true (or acceptable, or...).

To fix terms, let us hereafter refer to the conjunction of these ideas as, following Rosen's coinage, **Psychologistic Semantics**. Psychologistic Semantics, at least for imperative and permission sentences, is incomplete; psychological states are not endowed with the right sorts of properties to offer self-sufficient explanations of what is wrong with being decided on ϕ and tolerant of $\neg\phi$.

Indeed, I am inclined to be even more stringent than Schroeder in my opposition to semantic explanations in terms of the properties of states of mind. The canonical way of accounting for object language inconsistency is the derivation of a *contradiction in the metalanguage*. Given the ubiquity and importance of, e.g., reductio arguments in semantic theorizing, canonical explanations of object language inconsistency are clearly desirable. Any semantics which assigns sets of psychological states as semantic values cannot generate such derivations (or else is not entitled to think the derivations it does generate reflect the facts on the ground of the model theory; cf. Sect. 4.2.4). A psychological state accepting both p and its

negation, however irrational, is hardly *contradictory*.[19] Recall that Schroeder faults the Same Attitude Analysis of Sect. 3, not on grounds of potential explanatory adequacy, but on grounds of empirical adequacy (specifically, its commitment to clearly false predictions). Even were the SAA empirically adequate, it would still fail the standard I have set here. So far as I am concerned, any form of Psychologistic Semantics is a non-starter.

The proper response to this state of affairs, however, is not to blame the way we have attempted to design our semantics. It is to blame Psychologistic Semantics. For one, nothing about endorsing MEU requires embracing Psychologistic Semantics. Recall the example of propositions—objects encoding a locational perspective. Propositions, obviously, are not psychological states. But assigning a proposition as a sentence's semantic value helps account for its use: by expressing a semantic value encoding a locational perspective, a speaker invites her addressee to accept that semantic value; accepting a semantic value that encodes a locational perspective is a matter of self-locating, i.e., self-ascribing the locational property the proposition encodes (cf. Lewis 1979a; Egan 2007). Assigning a proposition as the semantic value of a sentence can, therefore, help account for why a sentence's characteristic use is representational.

Building on this, I want to suggest that the proper architecture for a semantics—not just of imperative and permission sentences, but *in general*—looks like this. [For an approach to general semantic theorizing in a similar vein, see Swanson (to appear). For an approach to theorizing about practical, non-descriptive language in a similar vein, see Silk (to appear).]

- **Abstract** or **formal entities** (*possibilities* understood as appropriately centered worlds, *strategies*[20] understood as sets of goals or action-descriptors, and suitable pairings thereof[21]) provide **verdicts** (for our purposes, a simple 1 or 0 will do[22]) for sentences.
- A set of possibilities encodes a (purely) locational perspective.
- A set of strategies encodes a (purely) orientational perspective.

---

[19] For the same reason, it seems the familiar technique of exploiting disquotation—e.g., inferring from the fact that '$a \wedge b$' holds at X the fact that both 'a' and 'b' hold at X—as a tool of proof in the metalanguage will be unavailable. If X is a state of mind, disquotation in this sense is simply *invalid*.

[20] The notion *plan* (like the notion of, say, *belief*) does admit of an abstract, rather than simply psychological, interpretation. Talk of a 'belief' can refer to an abstract object (the thing believed), and talk of a 'plan' as well (the actions or goals planned). Still, to highlight the shift away from a Psychologistic Semantics, I have chosen terms here—'possibility' and 'strategy'—that tend toward an abstract, rather than psychological, interpretation.

[21] The characteristic use of different kinds of language may warrant the introduction of more kinds of entities into the semantics. Since epistemic modals quantify over (epistemic) possibilities, a semantics of epistemic modals will have sets of (epistemic) possibilities providing verdicts for sentences. More interestingly, Swanson (to appear), Yalcin (2007) suggest that the characteristic use of the language of subjective uncertainty (including but not limited to epistemic modals) will warrant the introduction of probability functions (sets of which encode a probabilistic perspective) as a basic semantic entity. I ignore such complexities here.

[22] The meaning of a specific verdict will depend on the kind of sentence in question. When an imperative receives a verdict of 1 at a strategy, we will not be inclined to say it is *true at* that strategy. For discussion of how to interpret a positive verdict for an imperative relative to the relevant semantic entity, see Lemmon (1965), Segerberg (1990).

– A set of strategy-possibility pairs encodes a mixed (locational-orientational) perspective.
– A sentence's semantic value is exhausted by the condition it places on a possibility or strategy (or pair thereof)—by the perspective it encodes.

For our purposes, it suffices to say that the semantic value of a sentence is exhausted by a set of (possibly mixed) perspectives.

In giving a semantics for descriptive, imperative, and permission sentences, I suggest utilizing this architecture as follows.

– A descriptive sentence's semantic value is the set of possibilities relative to which the descriptive sentence receives a positive verdict.
– An imperative/permission sentence's semantic value is the set of strategies relative to which it receives a positive verdict.

A descriptive sentence's semantic value is something encoding a locational perspective, while that of an imperative/permission sentence is something encoding an orientational perspective.

5.3 A modal account

How can we use this sort of architecture to generate canonical explanations of object language inconsistency? Here is the gist. The condition C a descriptive sentence places on a possibility w corresponds to a proposition: the proposition that w meets C; two descriptive sentences are logically inconsistent just if they place contradictory conditions on any possibility. Similarly, the condition C an imperative or permission sentence places on a strategy σ also corresponds to a proposition: the proposition that σ meets C. Two imperative sentences (or two permission sentences, or mixtures thereof) can thus—so long as we do things right—place logically incompatible conditions (as opposed to just rationally incompatible conditions) on a single strategy. This is what allows an account of inconsistency and disagreement to get off the ground.

Here is one way of implementing this sort of view (among others).

The critical notions of the semantic metalanguage spoken by the Nonpropositionalist for imperatives and permissions (e.g., *being decided on*) are understood in *modal terms*. Let's say a strategy (in the abstract sense) is decided on ϕ, in the relevant sense, iff $\Box\phi$ is true relative to that strategy; the condition an imperative places on a strategy is that it accept a sentence of the form $\Box\phi$. In sum, an imperative $!\phi$ expresses the property a strategy σ has just if $\Box\phi$ is true at σ:

– $[\![!\phi]\!] = \lambda\sigma . [\![\Box\phi]\!]^\sigma = 1$ (Equivalently, $[\![!\phi]\!] = \lambda\sigma .\sigma \models \Box\phi$)

A permission $¡\phi$ expresses the property a strategy σ has just if $\Diamond\phi$ is true at σ:

– $[\![¡\phi]\!] = \lambda\sigma . [\![\Diamond\phi]\!]^\sigma = 1$ (Equivalently, $[\![¡\phi]\!] = \lambda\sigma .\sigma \models \Diamond\phi$)

It follows immediately that $!\phi$ and $¡\neg\phi$ are inconsistent.[23]

Proof Suppose there were some σ such that $\sigma \in \llbracket !\phi \rrbracket$ and $\sigma \in \llbracket \mathrm{i} \neg \phi \rrbracket$. Then $\sigma \models \Box \phi$ and $\sigma \models \Diamond \neg \phi$. Then $\sigma \models \Box \phi$ and $\sigma \models \neg \Box \neg \neg \phi$. **Contradiction**.

5.3.1 An explanation

We hold that ordinary, non-modal propositions are evaluated relative to possibilities. Modal propositions, we noted, are evaluated relative to things other than possibilities—domains of quantification (or pairs, triples,..., of objects precisely characterizing such domains). In the case of modal propositions about the property of a formal object like a strategy, the proposition can be evaluated for truth relative to a strategy. All of this is standard.

What is new is a "substantive" semantic claim about the verification-conditions of imperative and permission sentences: an imperative $!\phi$ is verified by a strategy iff $\Box \phi$ is true relative to it, while a permission $\mathrm{i}\phi$ is verified by a strategy iff $\Diamond \phi$ is true relative to it. If this is correct, an imperative $!\phi$ and permission $\mathrm{i} \neg \phi$ require for their consistency that there be some strategy relative to which the modal propositions $\Box \phi$ and $\Diamond \neg \phi$ are both true; they place logically inconsistent modal conditions on strategies.

In principle, this general sort of strategy is available to fans of Psychologistic Semantics for imperatives. Suppose we evaluate imperatives and permissions relative, not to formal objects (strategies), but psychological objects (plans). Nothing stops us from maintaining that $\llbracket !\phi \rrbracket$ is the set of plans relative to which $\Box \phi$ is true/accepted, while $\llbracket \mathrm{i} \neg \phi \rrbracket$ is the set of plans relative to which $\Diamond \neg \phi$ is true/accepted. It would seem to follow straightaway that supposing is some plan in both $\llbracket !\phi \rrbracket$ and $\llbracket \mathrm{i} \neg \phi \rrbracket$ leads to contradiction: the plan makes both $\Box \phi$ and $\Diamond \neg \phi$ true, and no plan can do *that*.

Things, however, are not so simple. As we saw in Sect. 4.2.4, some versions of Psychologistic Semantics are able to derive contradictions in proving object language inconsistencies. Whether they are *entitled* to these derivations is another matter. The form of the conditions $!\phi$ and $\mathrm{i} \neg \phi$ place on plans (satisfying $\Box \phi$ and $\Diamond \neg \phi$) makes it seem as if those conditions are logically incompatible. But, of course, from the standpoint of Psychologistic Semantics, they're not: if 'satisfies $\Box \phi$' and 'satisfies $\Diamond \neg \phi$' are psychological predicates, a plan satisfying both is logically

---

Footnote 23 continued
to define truth conditions for modal sentences from objects like strategies. For the most influential, which uses a strategy to determine an ordering of possibilities according to strategy-relative desirability, see Kratzer (1981). (2) The question of how to interpret the modal notions $\Box$ and $\Diamond$ is a hard one. Standardly $\Box$ is interpreted as a universal quantifier, $\Diamond$ existential, over strategically most desirable possibilities. For many reasons, these definitions are too simple (cf. Kratzer 1981; Cariani, to appear). (3) On some ways of resolving (1) and (2), my view formally resembles one independently developed by Silk (2013). (Despite the formal similarity there are major differences between our theories.)

Filling in these lacunae is, I want to assure the reader, orthogonal to our purposes here. So long as:

For all ψ and χ that are contradictory (such that $\chi \models \neg \psi$): $\Box \psi \models \neg \Diamond \chi$
(χ is prohibited if it thwarts a requirement)

As they will on *any* semantics of $\Box / \Diamond$, there is a canonical proof of the inconsistency of $!\phi$ and $\mathrm{i}\chi$.

Proof Suppose that $\chi \models \neg \psi$, and suppose for reductio that there is some σ such that $\sigma \in \llbracket !\psi \rrbracket$ and $\sigma \in \llbracket \mathrm{i}\chi \rrbracket$. Then $\sigma \models \Box \psi$ and $\sigma \models \Diamond \chi$. Then, since $\Box \psi \models \neg \Diamond \chi$, $\sigma \models \neg \Diamond \chi$ and $\sigma \models \Diamond \chi$. Contradiction.

possible. Once again, metalanguage (in this case, the language of boxes and diamonds) and model theory are out of step.

In sum: to give a canonical account of the target inconsistencies, imperatives and contrary permissions must place incompatible satisfaction conditions on the parameters relative to which they are evaluated. Such conditions are inappropriate if these are psychological in nature.

5.3.2 On semantics and use

Although we used the same strategy to account for inconsistency between imperatives and contrary permissions as for inconsistency between descriptive sentences and their negations—namely, tracing object language inconsistency to inconsistent conditions placed on the semantic object with respect to which the sentence is evaluated—an imperative $!\phi$ obviously has a set of strategies, rather than a proposition, as its semantic value. Couched in a theory that treats sets of strategies as encoding orientational, rather than locational, perspectives, the semantics of imperative and permission sentences is undeniably nonpropositional.

Such semantic values are, crucially, apt for reflecting the nonrepresentational use an imperative/permission characteristically has. An imperative $!\phi$, as a matter of its semantics, encodes an orientational perspective. It semantically specifies a property an agent can try to *psychologically approximate* (the property of having a plan representable with a strategy according to which $\Box\phi$), just as a descriptive sentence encoding a locational perspective specifies a property that an agent can try to psychologically approximate (the property of having beliefs representable with a set of possibilities encoding that particular location perspective).

There is a general theory of the interface between semantics and use lurking in the background, which is worth making explicit.

Semantics Encodes Conventional Communicative Function (SECCF)
Let Φ be any sentence and $[\![\Phi]\!]$ its semantic value. Then:

- $[\![\Phi]\!]$ encodes a perspective $P(\Phi) = [\lambda X.[\![\Phi]\!]^X = 1]$
- An utterance of Φ by a speaker S to addressee A is, in a normal context, interpreted as a proposal by S that A psychologically approximate $P(\Phi)$.[24]

Sentences express semantic values; semantic values encode perspectives. According to SECCF, in normal contexts, the sentence's use is derivable from this perspective.

---

[24] SECCF improves on, e.g., coordinative views of the interface between semantics and communicative function (on which utterances function to coordinate speaker and addressee on a state of mind). Though I doubt he would endorse such a view, Seth Yalcin provides a helpful formulation of it:

> The point of the speech act [is]... to engender coordination among one's interlocutors with respect to the property of states of mind the sentence semantically expresses in context. (2011, p. 311)

Coordinative views work well for sentences whose function is to assert, assertion's function is to make addressee and speaker share an attitude (belief) toward a proposition; assertions transfer contents between agents (Burge 1993; Egan 2007). They work poorly for sentences whose function is to command: in commanding that you leave, I hardly propose that we coordinate on the perspective my utterance expresses (the property, roughly, of planning to leave).

So sentences, by semantically encoding a perspective, derivatively encode their default uses. For instance, suppose ϕ expresses a proposition. Propositions encode locational perspectives. So ϕ encodes a locational perspective $P(\phi)$. In normal contexts, ϕ is used to propose that one's addressee come to approximate $P(\phi)$.[25]

5.4 Wrapping up

The objection from disagreement to Nonpropositionalism about imperatives erred in assuming, implicitly, that the domain of semantic values for imperatives would be composed of objects that could not underwrite a canonical account of inconsistency. We avoided the objection by allowing that the domain of semantic values for imperatives might be abstract objects—the sorts of abstract objects that are the "truth-makers" for modal sentences of the form $\Box\phi$ and $\Diamond\phi$. Even if this is not the correct semantics for imperative and permission sentences (although, I have argued elsewhere, I think it has some claim to that mantle), the strategy I have pursued here will be adaptable to a wide range of Nonpropositionalist accounts of their semantics. The disagreement problem—hence, the Frege–Geach Problem—is no problem for a Nonpropositionalist semantics for imperatives at all.

6 Expressivism: a manifesto

It is fair to wonder whether this general sort of strategy is available to the Expressivist. Have we not provided our opponents with precisely the right tool for resisting the claim that advancing a disagreement problem for Expressivism commits you to advancing a disagreement problem for nonpropositional semantics for imperatives? For Expressivism, unlike the relatively weak view that is Nonpropositionalism, is committed to a Psychologistic Semantics, is it not? How can it avail itself of the characteristics of abstract entities, like strategies (understood, perhaps, as sets of action-designators), against which modal sentences are evaluated for truth? How can Expressivists make use of contents in semantic explanation, while endorsing a claim, FMAU, that seems to require that semantic phenomena be given in terms of characteristics of states of mind?

In reply, I argue, first, that endorsing FMAU does not commit the Expressivist to a Psychologistic Semantics (although it does commit her to a Psychologistic Theory of *Meaning*). But this raises a question: what distinguishes the Expressivist from the

---

[25] Relevant precedents for the notion that sentences semantically encode their default uses are Asher and Lascarides (2001, 2003). I discuss this further in Charlow (2011, Ch. 2–3). Precedents for the notion that a sentence does this by expressing a property of a state of mind are Yalcin (2007, 2011), Swanson (to appear).

To say a sentence expressing a set of, e.g., worlds encodes a locational perspective (and thus a representational function) is not to say that expressing such an object can only function as a proposal for an agent to come to self-locate in a certain way. It is just to say this is how things work by *default*: the default function of a set of possible worlds is representational (Asher and Lascarides 2001, 2003). By default, an intelligible proposition is regarded as presented-as-true; as Burge has argued, "Understanding [propositional] content presupposes and is interdependent with understanding the force of presentations of content," i.e., as true (1993, 481ff). Similarly for nonpropositional content; by default, an intelligible nonpropositional content presents, e.g., some object as desirable or worth pursuing.

run-of-the-mill Nonpropositionalist, if not her Psychologistic Semantics? What does FMAU add that the conjunction of Nonpropositionalism, MEU, and SECCF would leave out? In the second part of my reply, I try to answer this question.

6.1 Theories of meaning and semantic theories

Expressivists about normative (and imperative) language have every reason to avoid Psychologistic Semantics for those kinds of language. The question is whether they consistently can.

A Psychologistic Semantics for a fragment $\mathcal{F}$, in the sense relevant here, assigns states of mind as the *semantic values* of sentences of $\mathcal{F}$. The only core Expressivist commitment that could plausibly be viewed to commit an Expressivist to such a semantics is FMAU. FMAU says psychological states (or, more generally, uses) are explanatorily fundamental in an account of the meaning of normative language. Does this require the Expressivist to say that the semantics of normative language is a semantics *of* psychological states?

If, as the Expressivist contends, the default use of normative language is nonrepresentational, then the semantic value of a normative sentence should be something nonpropositional. It would be natural for her to go in for a Psychologistic Semantics for normative sentences—so natural, in fact, that I know of no Expressivist who has demurred. But why not instead say that normative sentences, in view of their default use (with which the Expressivist is fundamentally concerned), semantically express sets of strategies? Indeed, such semantic values seem tailor-made to confirm her view about the use of normative sentences—that their function is nonrepresentational and plan-, rather than belief-, guiding. That is her basic concern, and the semantic theory in question does quite well by it. What, besides a Psychologistic Semantics, does this strategy *cost* her?

Here is one possibility. Taking this sort of strategy does mean that a proper Expressivist semantics for some kind of language needn't differ from a run-of-the-mill nonpropositional semantics for that kind of language. But isn't Expressivism supposed to yield a *distinctive semantics*—one recognizably different from non-Expressivist semantics? In getting rid of Psychologistic Semantics, doesn't the Expressivist give up the very thing that made her theory so interesting in the first place?

It would be easy to reply: I am only interested in a nonpropositional (non-cognitivist, non-truth-conditional) semantics for normative language, so as to vindicate a broader moral anti-realism or non-cognitivism. Aren't you missing the meta-ethical forest for the terminological trees? Supposing we just endorse a version of the semantics for imperatives and permissions for normative language, we have something resembling proof that a proper non-cognitivist meta-ethic need not be troubled by *any* version of the Frege–Geach Problem. This is a tantalizing prospect. If all we must do to run with it is throw *Wise Choices, Apt Feelings* under the bus, that might seem a small price to pay.

There is nothing wrong, and much right, with such a reply. But it is unfair to the Expressivist.

6.2 "Special sciences" expressivism

Expressivism offers a theory of linguistic meaning. So it is certainly committed to *some semantic theory or other*. But a sentence's conventional meaning is not exhausted by its semantics; consider, e.g., conventional implicatures. Clearly, the true theory of meaning has strictly more content than the true semantics. When paired to the sort of Nonpropositionalist semantic theory I have suggested above, Expressivism's theory of meaning has *vastly* more content than the attendant semantic theory. Therein lies Expressivism's potential salvation as a meta-ethic (as well as its interest vis-à-vis non-Expressivist Nonpropositionalism).

What can we say about the nature of that extra content? What can Expressivism say that non-Expressivist Nonpropositionalism does not, and what might be interesting about it?

We are, I believe, mistaken if we expect Expressivism to say something distinctive about the semantics of normative language. But Expressivism says plenty that is distinctive about meta-ethical issues, including (but not limited to): the nature and functional role of normative judgment, the nature and functional role of normative concepts, how information about the world is supposed to bear on normatively loaded states of mind, when one moral judgment warrants another, and so on.

It, moreover, *reifies* these meta-ethical issues, by treating them as fundamental to theorizing about the meaning of normative language. In general, Expressivism about a kind of language is distinctive, in large part, because it is a theory of meaning that, unlike any other mode of serious inquiry into linguistic meaning, works *by* answering questions about its role in communication (rather than, e.g., its logic). Expressivism about normative language is distinctive, in large part, because it works by answering questions about matters normally taken to be outside the purview of serious theorizing about the meaning of normative language. Not only is the Expressivist's methodology distinctive; properly applied, it can be fruitfully deployed in debates in semantics and elsewhere.[26]

Is there a non-methodological sense in which issues about use are fundamental in Expressivistic theorizing? Yes—there is, at least, a metasemantic sense.[27] For the sort of Expressivist I have in mind, the relation of semantics to meaning (use) may be said to be roughly akin to a certain view of the relationship between the mental and the physical. The analogous view is this: while physical explanations are fundamental—perhaps in virtue of an asymmetrical dependence of the psychological on the physical—psychological explanations enjoy a special status in answering certain questions in which we have reason to be interested—issues lacking a satisfactory resolution in terms of purely physical explanations. Whether or not such a view is correct, it is plainly possible.

For the Expressivism I have in mind, uses are fundamental, perhaps in virtue of an asymmetrical dependence of semantic facts (facts about content) on facts about

---

[26] Areas where Expressivists (and their sympathizers) can claim to have moved the semantic dialectic forward include modality (Yalcin), conditionals (Swanson), and imperatives (Portner, Charlow).

[27] I am grateful to Alex Silk for helping me to think through this issue. For a similar (but much more detailed) take on the theoretical content of Expressivism, see Silk (to appear, Sect. 3).

characteristic use. Notice that this sort of dependence will have as a consequence our normal commitment to thinking that the kind/type of semantic content for a sentence varies with its default use—propositions go with assertions, partitions with questions, etc. But the dependence view says something beyond this bare statement of semantic fact. It offers a metasemantic rationale for it: semantics facts are ultimately determined by facts about use. This in spite of the fact that many semantic explanations cannot be stated as explanations *within* the theory of meaning proper. On this understanding of Expressivism, FMAU may clearly be retained, while Psychologistic Semantics is rejected. On the analogy we are pursuing, Expressivists who embrace Psychologistic Semantics are rather like thoroughgoing reductive physicalists, those who reject it akin to "special sciences" physicalists.

(This is not, by the way, to say that semantic phenomena are not phonemena about meaning. Meaning, on the view I am describing, has *dynamic* and *static* dimensions. The dynamic dimension concerns language's use in communication, the static dimension its model-theoretic properties—e.g., its logic. These dimensions are related, in the sense specified above, but distinct. For the Expressivist, it is the dynamic, rather than the static, dimension that is fundamental. Nor is it to say that the theory of meaning abjures semantics; there is a sense in which any theory of meaning is a semantic theory. But there are certain semantic phenomena—logical phenomena in particular—that are not accounted for in the theory of meaning proper.)

Is there a concrete semantic (rather than just metasemantic) sense in which uses show up in Expressivistic theorizing? Yes and no. No doubt, whatever distinctive insights into questions about normative judgment and concepts the Expressivist generates, some of these will show up in a semantic theory and, thus, be equally available to a non-Expressivist Nonpropositionalist. Indeed, the version of Nonpropositionalism about normative language I have mentioned builds directly on Gibbard's own understanding of the content and import of normative claims.

But many will not. Semantics, as currently practiced, gives issues like the functional role of judgments of rightness and wrongness (to say nothing of judgments of bravery, disgustingness, and guilt) a wide berth. Rightfully so, for it is totally unclear what the contribution of an account of such judgments' functional role in accounting for the relatively parochial body of concerns in which semanticists take an interest when they talk about words like 'right' and 'wrong', or the semantics of modalities that express normative concepts, would be. Expressivism, as a theory of meaning, treats them as central. From the semanticists' point of view, it might be hard to care. From the point of view of an Expressivist theory of meaning, it is everything.

6.3 Hare-ian noncognitivism

In my introduction, I asserted that the semantics of imperatives offers reasonable cause for optimism for the Expressivist. I supported this by arguing that (i) the most cutting version of Frege–Geach Problem for Expressivism was equally a problem for nonpropositional accounts of imperatives, (ii) nonpropositional accounts of imperatives should not be regarded as being beset by the Frege–Geach Problem, and (iii) the maneuvers that allow the Nonpropositionalist about imperatives to escape the Frege–Geach Problem are equally available to the Expressivist about normative language.

This makes it seem plausible that serious linguistic work on imperatives will hold the key to developing a proper form of noncognitivism about the normative—one that addresses, not only the disagreement version of the Frege–Geach problem, but many other problems besides (embedding in indicative conditionals, under binary connectives, under quantifiers, and so on). Noncognitivism's prospects, at least in the near term, are less hairy, but more Hare-ian, than they have been in a while.

References

Aloni, M. (2007). Free choice, modals, and imperatives. *Natural Language Semantics, 15*, 65–94. doi: 10.1007/s11050-007-9010-2.

Åqvist, L. (1964). Interpretations of deontic logic. *Mind, 73*, 246–253. doi:10.1093/mind/LXXIII.290.246.

Asher, N., Lascarides, A. (2001). Indirect speech acts. *Synthese, 128*, 183–228. doi:10.1023/A:1010340508140.

Asher, N., Lascarides, A. (2003). *Logics of Conversation*. Cambridge: Cambridge University Press.

Bennett, J. (1970). [untitled omnibus review]. *Journal of Symbolic Logic, 35*, 314–318.

Burge, T. (1993). Content preservation. *The Philosophical Review, 102*, 457–88.

Cariani, F. 'Ought' and resolution semantics. *Noûs*, to appear.

Charlow, N. (2010). Restricting and embedding imperatives. In M. Aloni, H. Bastiaanse, T. de Jager & K. Schulz (Eds.), *Logic, language, and meaning: Selected papers from the 17th Amsterdam colloquium*. ILLC. doi:10.1007/978-3-642-14287-1_23.

Charlow, N. (2011). Practical language: Its meaning and use. Ph.D. Dissertation, University of Michigan. Retrieved http://www.natecharlow.com/work/dissertation.pdf.

Charlow, N. Logic and semantics for imperatives. *Journal of Philosophical Logic*, to appear.

Dreier, J. (2006). Negation for expressivists: A collection of problems with a suggestion for their solution. In R. Shafer-Landau (Ed.) *Oxford studies in metaethics: Volume 1*. Oxford: Oxford University Press.

Dreier, J. (2009). Relativism (and expressivism) and the problem of disagreement. *Philosophical Perspectives, 23*, 79–110. doi:10.1111/j.1520-8583.2009.00162.x.

Dummett, M. (1973). *Frege: Philosophy of language*. London: Duckworth.

Egan, A. (2007). Epistemic modals, relativism, and assertion. *Philosophical Studies, 133*, 1–22. doi: 10.1007/sll098-006-9003-x.

Geach, P. T. (1958). Imperative and deontic logic. *Analysis, 18*, 49–56. doi:10.2307/3326785.

Gibbard, A. (1990). *Wise choices, apt feelings*. Cambridge: Harvard University Press.

Gibbard, A. (2003). *Thinking how to live*. Cambridge: Harvard University Press.

Groenendijk, J. & Stokhof, M (1984). Studies on the semantics of questions and the pragmatics of answers. Ph.D. Dissertation, University of Amsterdam. Retrieved http://dare.uva.nl/record/123669.

Hamblin, C. (1973). Questions in Montague English. *Foundations of Language, 10*, 41–53, URL http://www.jstor.org/stable/25000703.

Han, C.-H. (1998). The structure and interpretation of imperatives: Mood and force in universal grammar. Ph.D. Dissertation, University of Pennsylvania. Retrieved http://www.sfu.ca/chunghye/papers/dissertation.pdf.

Hare, R. M. (1952). *The language of morals*. Oxford: Oxford University Press.

Hare, R. M. (1967). Some alleged differences between imperatives and indicatives. *Mind, 76*, 309–326. doi:10.1093/mind/LXXVI.303.309.

Jørgensen, J. (1937–1938). Imperatives and logic. *Erkenntnis, 7*, 288–296.

Karttunen, L. (1977). Syntax and semantics of questions. *Linguistics and Philosophy, 1*, 3–44. doi: 10.1007/BF00351935.

Kratzer, A. (1977). What 'must' and 'can' must and can mean. *Linguistics and Philosophy, 1*, 337–355. doi:10.1007/BF00353453.

Kratzer, A. (1981). The notional category of modality. In H. Eikmeyer & H. Rieser (Eds.), *Words, worlds, and contexts* (pp. 38–74). Berlin: De Gruyter.

Lemmon, E. J. (1965). Deontic logic and the logic of imperatives. *Logique et Analyse, 8*, 39–71.

Lewis, D. (1970). General semantics. *Synthese, 22*, 18–67. doi:10.1007/BF00413598.

Lewis, D. (1976). Probabilities of conditionals and conditional probabilities. *Philosophical Review, 85*, 297–315 URL http://www.jstor.org/pss/2184045.

Lewis, D. (1979a). Attitudes *de dicto* and *de se*. *The Philosophical Review, 88*, 513–543.

Lewis, D. (1979b). A problem about permission. In E. Saarinen, R. Hilpinen, I. Niiniluoto & M. B. Hintikka (Eds.), *Essays in honour of Jaakko Hintikka*. Dordrecht: D. Reidel.

Lewis, D. (1979c). Scorekeeping in a language game. *Journal of Philosophical Logic, 8*, 339–359. doi:10.1007/BF00258436.

Mastop, R. (2005). What can you do? Ph.D. Dissertation, ILLC, Amsterdam.

Mastop, R. (2012). Imperatives as semantic primitives. *Linguistics and Philosophy, 34*, 305–340. doi:10.1007/s10988-011-9101-x.

Portner, P. (2004). The semantics of imperatives within a theory of clause types. In K. Watanabe & R. Young (Eds.), *Proceedings of SALT 14*. CLC Publications. Retrieved http://semanticsarchive.net/Archive/mJlZGQ4N/.

Portner, P. (2007). Imperatives and modals. *Natural Language Semantics, 15*, 351–383. doi:10.1007/s11050-007-9022-y.

Portner, P. (2010). Permission and choice. Retrieved http://semanticsarchive.net/Archive/jI1YjMyY/. Talk delivered at Semantics and Philosophy in Europe III.

Rosen, G. (1998). Critical study of Blackburn's *Essays in quasi-realism*. *Noûs, 32*, 386–405. doi:10.1111/0029-4624.00106.

Sadock, J. M., Zwicky, A. M. (1985). Speech act distinctions in syntax. In T. Shopen (Ed.), *Language typology and syntactic description: Clause structure*. Cambridge: Cambridge University Press.

Schroeder, M. (2008a). *Being For*. Oxford: Oxford University Press.

Schroeder, M. (2008b). How expressivists can and should solve their problems with negation. *Noûs, 42*, 573–599. doi:10.1111/j.1468-0068.2008.00693.x.

Schroeder, M. (2008c). What is the Frege–Geach problem? *Philosophy Compass, 3/4*, 703–720. doi:10.1111/j.1747-9991.2008.00155.x.

Schwager, M. (2006). Conditionalized imperatives. In M. Gibson & J. Howell (Eds.), *Proceedings of SALT 16*. CLC Publications. Retrieved http://user.uni-frankfurt.de/scheiner/papers/schwagerFEB07.pdf.

Segerberg, K. (1990). Validity and satisfaction in imperative logic. *Notre Dame Journal of Formal Logic, 31*, 203–221. doi:10.1305/ndjfl/1093635415.

Silk, A. (2013). How to be an ethical expressivist. Ms.

Silk, A. Truth-conditions and the meanings of ethical terms. In R. Shafer-Landau (Ed.), *Oxford Studies in Metaethics*, volume 8. Oxford University Press, to appear.

Smith, M. (1987). The humean theory of motivation. *Mind, XCVI*, 36–61. doi:10.1093/mind/XCVI.381.36.

Smith, M. (1994). *The moral problem*. Oxford: Blackwell.

Stalnaker, R. (1978). Assertion. In P. Cole (Ed.), *Syntax and semantics 9: Pragmatics*. New York: Academic Press.

Starr, W. B. (2011). A preference semantics for imperatives. Ms.

Stenius, E. (1967). Mood and language game. *Synthese, 17*, 254–274. doi:10.1007/BF00485030.

Swanson, E. The application of constraint semantics to the language of subjective uncertainty. *Journal of Philosophical Logic*, to appear.

Unwin, N. (1999). Quasi-realism, negation and the Frege–Geach problem. *The Philosophical Quarterly, 49*, 337–52. doi:10.1111/1467-9213.00146.

Unwin, N. (2001). Norms and negation: A problem for Gibbard's logic. *The Philosophical Quarterly, 51*, 60–75. doi:10.1111/1467-9213.00214.

van Roojen, M. (1996). Expressivism and irrationality. *The Philosophical Review, 105*, 311–335. Retrieved http://www.mvr1.com/ExpressivismandIrrationality.pdf.

van Rooy, R. (2000). Permission to change. *Journal of Semantics, 17*, 119–145. doi:10.1093/jos/17.2.119.

Wedgwood, R. (2007). *The nature of normativity*. New York: Oxford University Press.

Wittgenstein, L. (1958). *Philosophical investigations*. Oxford: Blackwell.

Yalcin, S. (2007). Epistemic modals. *Mind, 116*, 983–1026. doi:10.1093/mind/fzm983.

Yalcin, S. (2011). Nonfactualism about epistemic modality. In B. Weatherson & A. Egan (Eds.), *Epistemic modality*. Oxford: Oxford University Press.

Zimmerman, D. (1980). Force and sense. *Mind, 89*, pp. 214–233. Retrieved http://www.jstor.org/pss/2253170.