Commitment in Mood and Modality

Alex Silk

a.silk@bham.ac.uk

Draft of March 2016

Abstract

This paper develops an account of mood selection with attitude predicates in French. I start by examining the “contextual commitment” approach to mood developed in work by Paul Portner and Aynat Rubinstein. I raise empirical and theoretical challenges for P/R’s analysis of contextual commitment and its role in P/R’s explanations of mood selection, as well as of broader phenomena like the weak/strong necessity modal distinction. There are indicative-selecting verbs that can be felicitous in contexts where there isn’t contextual commitment (in P/R’s sense); and there are subjunctive-selecting verbs that involve no less contextual commitment (in P/R’s sense) than certain indicative-selecting verbs. I then propose an alternative account of mood selection in French. The guiding idea is to analyze mood in terms of a relation between a predicate’s modal backgrounds and a relevant overall state of mind. Indicative-selecting attitude predicates “presuppose commitment” in the sense of presupposing that the predicate’s modal backgrounds are entailed by the modal backgrounds representing the attitude state — formally, that the preordered set \( (\bigcap f_p(x, w), \preceq_{f_p(x, w)} ) \) determined by the predicate’s semantics is included in the preordered set \( (CS_l, \preceq_l) \) representing the local context introduced by the predicate. This account provides an improved explanation of various puzzling mood-selection phenomena. These phenomena include subjunctive-selection with emotive factives, indicative-selection with fiction verbs, indicative-selection with espérer ‘hope’ versus subjunctive-selection with vouloir ‘want’, and indicative-selection with commissives versus subjunctive-selection with directives. The mood-selection properties of these predicates can be derived from the proposed semantics of mood, independently motivated features of the predicates’ semantics, and general principles of interpretation.
## Contents

1. **Introduction**  

2. **Portner & Rubinstein's contextual commitment account of mood**  
   2.1 Desideratives and doxastics  
   2.2 Commissives and directives  
   2.3 Fiction verbs  
   2.4 Commitment and modal strength  
   2.5 Recap  

3. **Challenges**  
   3.1 Desideratives and doxastics  
   3.2 Commissives and directives  
   3.3 Fiction verbs  
   3.4 Commitment and modal strength  
   3.5 Recap  

4. **Mood selection and states of mind**  
   4.1 Background and analysis  
   4.2 Applications  
   4.2.1 Indicative-selection with *croire*  
   4.2.2 Indicative-selection with fiction verbs  
   4.2.3 Indicative-selection with *espérer* vs. subjunctive-selection with *vouloir*  
   4.2.4 Subjunctive-selection with emotive factives  
   4.2.5 Indicative-selection with *promettre* vs. subjunctive-selection with *ordonner*  
   4.3 Selection and grammaticalization  

5. **Literature comparisons**  

6. **Conclusion**
# 1 Introduction

This paper examines the semantics and pragmatics of verbal mood selection. I focus primarily on the factors affecting the selection of indicative versus subjunctive mood in the complements of attitude verbs and speech act verbs in French, as in (1)–(2).

(1) **Indicative-selecting verb:**
   a. Alice croit que Blanche est végétarien.
      Alice thinks that Blanche is.IND vegetarian
   b. *Alice croit que Blanche soit végétarien.
      Alice thinks that Blanche is.SBJV vegetarian

(2) **Subjunctive-selecting verb:**
   a. *Alice veut que Blanche est végétarien.
      Alice wants that Blanche is.IND vegetarian
   b. Alice veut que Blanche soit végétarien.
      Alice wants that Blanche is.SBJV vegetarian


How to implement these ideas is controversial. Details of implementation aside, treating mood selection (roughly) in terms of commitment to the embedded proposition captures a range of examples quite well. It captures the selection of the indicative with predicates of acceptance (*croire* ‘believe’, *savoir* ‘know’) and assertion (*dire* ‘say’), as in (1) and (3). And it captures the selection of the subjunctive with desideratives such as *vouloir* ‘want’ and directives (*ordonner* ‘order’), as in (2) and (4).

---

1Hereafter I will often use ‘attitude verb’ broadly to include verbs describing mental states and speech acts.
However, there are well-known puzzle cases. For instance, first, uses of emotive
factives (‘regret’, ‘be happy’) imply commitment to the embedded proposition, at
least by the attitude subject if not also by the speaker. Yet emotive factives contrast
with non-emotive factives in requiring subjunctive in French, as reflected in $(5)$–$(6)$:

$(5)$ Alice est heureux que Blanche soit/*soit végétarien.
Alice is happy that Blanche is.SBJV/*is.IND vegetarian

$(6)$ Alice sait que Blanche est/*soit végétarien.
Alice knows that Blanche is.IND/*is.SBJV vegetarian

On the flip side, fiction verbs (‘imagine’, ‘dream’) needn’t imply any doxastic com-
mmitment, and yet they select indicative, as in $(7)$ with rêver ‘dream’.

$(7)$ Alice a rêvé que Blanche était/*fût végétarien.
Alice dreamed that Blanche was.IND/*was.SBJV vegetarian

Further, although many desire verbs select subjunctive, as in $(2)$ with vouloir, others
such as espérer ‘hope’ select indicative:

$(8)$ Alice espère que Blanche est/*soit végétarien.
Alice hopes that Blanche is.IND/*is.SBJV vegetarian

And whereas directives select subjunctive, as in $(4)$ with ordonner, commissives se-
lect indicative, as in $(9)$ with promettre ‘promise’:

$(9)$ Alice promet que Blanche est/*soit végétarien.
Alice promises that Blanche is.IND/*is.SBJV vegetarian

Indeed Portner & Rubinstein 2012 appeals to the contrasts in mood selection
among desideratives and between commissives/directives in arguing against what
they call the “proto-standard analysis of mood” — roughly, the view that subjunctive-
selecting verbs are precisely those verbs with a comparative semantics. Whatever
might distinguish the semantics of ‘hope’/‘promise’, on the one hand, and ‘want’/‘order’,
on the other, it is unlikely to be that the latter have a semantics involving an evalu-
ative comparison of alternatives while the former do not.
In sum, we have the following principle puzzle cases to explain:

- subjunctive-selection with emotive factives,
- indicative-selection with fiction verbs,
- indicative-selection with desideratives such as *espérer*, versus subjunctive-selection with other desideratives such as *vouloir*,
- and indicative-selection with commissives, versus subjunctive-selection with directives.

Why do some attitude verbs implying doxastic commitment select indicative, while others select subjunctive? Why do desire verbs like *vouloir* select subjunctive, while *espérer* and fiction verbs select indicative? Why does reporting obligations created with directives require subjunctive, while reporting obligations created with promises requires indicative?

In this paper I start by examining one recent approach to these issues developed in work by Paul Portner and Aynat Rubinstein ([Portner & Rubinstein 2012
Rubinstein 2012]), mentioned above. Portner and Rubinstein (hereafter P/R) follow many previous accounts in explaining mood selection in terms of commitment. However, they argue that what determines mood selection isn't commitment to the truth of the verb's complement, but rather commitment to the verb's modal backgrounds — i.e., to the beliefs, preferences, etc. which figure in the verb's semantics. What distinguishes indicative-selecting attitude verbs, on P/R's view, is that they presuppose that all “relevant individuals are prepared to defend the modal background of the attitude as being reasonable and appropriate” ([Portner & Rubinstein 2012: 462]). This makes room for indicative-selecting verbs such as *espérer* or *promettre* with a preference-based comparative semantics. Very roughly: *espérer* ‘hope’, unlike *vouloir* ‘want’, presupposes that the subject is committed to the relevant desires (and beliefs); and commissives, unlike directives, presuppose that the subject and object are both committed to the obligation — hence indicative-selection with *espérer* and *promettre*, and subjunctive-selection with *vouloir* and *ordonner*. Or so P/R argue. (We will examine P/R's arguments, as well as our other puzzle cases, in due course.)

P/R's development of the notion of contextual commitment provides an important advance in our understanding of the semantics and pragmatics of mood and modality. However, I will argue that P/R's specific analysis of contextual commitment, and the use to which it is put in explaining mood selection, is problematic. The principle general worry is that P/R's pretheoretic notion of commitment isn't fit to play the needed fundamental explanatory role. There are indicative-selecting verbs that can be felicitous in contexts where there isn't contextual commitment (in P/R's sense); and there are subjunctive-selecting verbs that involve no less contextual
commitment (in P/R's sense) than certain indicative-selecting verbs. Second, I will suggest that some of the intuitive appeal of P/R's account may result from a potential ambiguity in the notion of "commitment to a modal background" — namely, between commitment to the content of a modal background, and commitment to the fact that such-and-such modal background correctly represents the relevant beliefs, priorities, etc. This ambiguity raises problems for P/R's broader appeals to contextual commitment, in particular in distinguishing weak vs. strong necessity modals.

In response I will propose an alternative commitment-based account of mood selection in French. I treat indicative mood as associated with a generalized context set presupposition. I propose that indicative mood carries a presupposition that any modal backgrounds used in evaluating the clause are entailed by the modal backgrounds representing the local/global context. Applied to attitude complements in French, this amounts to a presupposition about the relation between the modal backgrounds figuring in the verb's semantics and the modal backgrounds representing the relevant overall state of mind. This state of mind can include both doxastic and non-doxastic components (e.g., beliefs, preferences). Indicative-selecting attitude predicates “presuppose commitment,” not necessarily in the sense of presupposing a commitment to the truth of the complement or to the predicate's modal backgrounds, but in the sense of presupposing that the predicate's modal backgrounds are entailed by the modal backgrounds representing the attitude state. By enriching our understanding of subjects' states of mind and commitments, and refining our theoretical interpretation of local/global context accordingly, we can provide an improved account of the mood-selection puzzles described above. The mood-selection properties can be derived from the proposed semantics of mood, independently motivated features of the predicates' semantics, and general principles of interpretation.

The paper is organized as follows. §2 explains P/R's contextual commitment account of mood, and how it improves on existing accounts. §3 raises various empirical and conceptual challenges for P/R's account, as briefly described above. §4 develops the proposed alternative account of verbal mood selection, and applies the account to the relevant puzzle cases. §5 compares this proposal to certain others in the literature. §6 concludes.

Before getting started, a quick clarificatory remarks on the scope of the present discussion: I focus only on mood marking in French; specifically, on mood marking in complement clauses of attitude predicates; and more specifically, on cases of mood selection, i.e. predicates which require a particular mood in the complement clause. There are interesting puzzles concerning variations in mood marking across languages (Romance and non-Romance), concerning mood marking in other linguistic contexts (e.g., in different types of root clauses, relative clauses, and adjuncts),
and concerning interpretive effects of using indicative/subjunctive with predicates that can optionally embed either mood. I leave it to future research to investigate how the account of mood selection in this paper may be extended to mood marking in other languages and linguistic environments.

2 Portner & Rubinstein’s contextual commitment account of mood

This section examines Portner & Rubinstein’s (P/R’s) contextual commitment account of verbal mood. First, some formal background:

Following much semantically-oriented work on mood, P/R utilize a Kratzerian modal framework for the semantics of attitude predicates (n.

Modal expressions are interpreted with respect to two modal backgrounds, treated as functions from worlds to sets of propositions. Given an evaluation world, these modal backgrounds determine a modal base \( f(w) \) that represents a body of information, and an ordering source \( g(w) \) that represents a body of priorities (norms, values, goals, etc.). These parameters can be contextually supplied or specified by the lexical semantics of the modal expression, as with attitude verbs. For instance, a doxastic attitude verb such as \( \text{croire} \) ‘believe’ takes a modal base that represents what the subject believes, and a desire verb such as \( \text{vouloir} \) ‘want’ takes an ordering source that represents what the subject desires. (For attitude verbs, the modal backgrounds may take an individual argument \( x \) in addition to a world argument \( w \). For ease of exposition I sometimes use ‘modal base’ to refer to the set of propositions \( f(x, w) \), sometimes to the set of worlds \( \cap f(x, w) \) in which these propositions are true; context should disambiguate.)

Whereas modal bases must be consistent and include the evaluation world, so that \( w \in \cap f(w) \), ordering sources needn’t have either of these properties. A modal’s ordering source can be used to generate a preorder on the set of accessible worlds determined by the modal base, \( (\cap f(w), \preceq_{g(w)}) \), or on a set of alternative propositions \( (C, \preceq_{g(w)}) \). What P/R call the “proto-standard analysis of mood” treats subjunctive-selecting predicates as those which take a non-empty ordering source, leading to a comparative semantics — as reflected in the first-pass semantics for \( \text{vouloir} \) ‘want’ in (10), in contrast to the semantics for \( \text{croire} \) ‘believe’ in (11).[^3]

[^2]: See [Goble 2013](#) for survey discussion of precedents in deontic logic.

[^3]: The preorder on worlds \( \preceq_{g(w)} \) can be generated from the premise set \( g(w) \) in the usual way: for any worlds \( u, v, u \preceq_{g(w)} v \iff \forall p \in g(w): v \in p \Rightarrow u \in p \). How the ordering on propositions
Indicative-taking verbs such as espé rer ‘hope’ and promettre ‘promise’ pose a challenge for such a view: As a desire verb, espé rer would presumably be like vouloir ‘want’ in taking a bouletic ordering source DES that represents the subject’s desires; and promettre would presumably be like ordonner ‘order’ in taking a deontic ordering source OBL that represents the subject’s obligations. A defender of the proto-standard theory might respond by treating DES/OBL as modal bases with such indicative-taking verbs, presupposing that the relevant desires/obligations are consistent. This would lead to a non-comparative semantics like \( (12) \) for espé rer. However, saying this threatens to undermine the predictiveness of the account. As P/R note, any non-comparative semantics can be reformulated in a comparative way, as reflected in \( (13) \) for croire, letting \( \text{DOX}_{x,w} \) be a premise set that represents the ideal of approximating \( x \)'s doxastic state of mind (cf. Bittner 2011).

\[
(10) \quad [x \text{ vouloir } p]_w = 1 \text{ iff } p <_{\text{DES}(x,w)} \neg p \\
(11) \quad [x \text{ croire } p]_w = 1 \text{ iff } \cap \text{DOX}_{x,w} \subseteq p
\]

(12) \[ x \text{ espé rer } p \]_w = 1 \text{ iff } \cap \text{DES}(x, w) \subseteq p \\
(13) \[ x \text{ croire } p \]_w = 1 \text{ iff } p <_{\text{DOX}_{x,w}} \neg p \\
\quad \text{(cf. Portner & Rubinstein 2012: 468–469)}

Indeed, minimality semantics are commonplace in the literatures on belief change and updating (cf. Makinson 1993). Absent an independent account of what attitudes serve as modal bases vs. ordering sources in different cases, appealing to having a (non-)comparative semantics is insufficiently explanatory.

To avoid this challenge facing the proto-standard analysis, P/R treat mood selection in terms of commitment to the modal backgrounds associated with the attitude predicate. P/R define the relevant notion of commitment as follows. (P/R follow Hacquard 2006 in treating modal backgrounds as relativized to events; this difference won’t be important for our purposes.)

\[
(14) \quad \text{Commitment to modal backgrounds:} \\
\text{An individual } a \text{ is committed to a modal background } h \text{ in event } e \text{ iff } a \text{ is disposed/prepared in } e \text{ to argue for } h(e) \text{ in a conversationally appropriate way (e.g., by arguing that it is rational/proper/sensible/wise) in any relevant conversation } c.
\]

is generated won’t be important for our purposes (see, e.g., Kratzer 1981, 1991, 2012, Lassiter 2014). One might read \( p <_{g(w)} \neg p \) as saying that for every \( \neg p \)-world in \( \cap f(w) \), there is a \( p \)-world in \( \cap f(w) \) that satisfies a (possibly improper) superset of propositions in \( g(w) \), and not vice versa.
One is “committed to a modal background” (modal base, ordering source), in P/R’s sense, if one treats its content — the relevant information, preferences, etc. — as “reasonable” and is “willing to defend it”, if prompted. What distinguishes indicative from subjunctive mood, on P/R’s account, is a presupposition of contextual commitment: *Indicative* mood presupposes that every individual argument of the predicate is committed to every modal background associated with the predicate. *Subjunctive* mood lacks such a presupposition; it has no semantic effect. (Subjunctive is compatible with contextual commitment; it simply fails to presuppose it.)

P/R argue that this notion of contextual commitment explains the contrasts between seemingly similar predicates which select different moods. In each case, P/R claim, the indicative-selecting predicate presupposes contextual commitment, whereas the analogous subjunctive-selecting predicate does not. Take the contrast between *espé rer* ‘hope’ and *vouloir* ‘want’. P/R note that the speaker in (15) can report the king’s desire using ‘want’ but not ‘hope’.

(15)  [Context: The king is being bothered by an uppity bishop and makes his annoyance known to some knights. These knights go and kill the bishop, and when the king hears about it, he is angry because it makes him look bad with the church. The knights respond with (a) or (b).]

a. Mais vous vouliez qu’il soit tué!
   but you wanted that he be. SBJV killed
   ‘But you wanted him to be killed!’

b. ??Mais vous espériez qu’il serait/est tué!
   but you hoped that he be. COND. IND/ is. IND killed
   ??’But you hoped for him to be killed!’

Contextual commitment provides a diagnosis: The indicative ‘hope’-ascription presupposes that the subject (=the king) is committed to his desire for the bishop to be killed. Using ‘hope’ is anomalous insofar as the king isn’t prepared to defend this desire as reasonable in the conversation. By using ‘want’ the speaker can felicitously report the king’s desire without implying that the king is committed to it.

---

---

---
Similarly, P/R claim that although ‘promise’ and ‘order’ both report the creation of obligations, they differ with respect to contextual commitment. With promising, “the promiser and promisee must see the thing promised as preferable”; with ordering, by contrast, “the person ordered need not think what they are ordered to do is preferable” (2012:473). Consider (16)–(17).

(16) Marie a promis à Bill qu'elle amènerait le dessert à la fête. Marie has promised to Bill that she will bring dessert to the party.

(17) Marie a demandé à Bill qu'il amène le dessert à la fête. Marie has demanded to Bill that he bring dessert to the party.

In promising Bill that she will bring dessert, Mary “proposes to bind [herself] with a priority, and the object [Bill] has no grounds for disputing this” (2012:473). Hence in (16) there is contextual commitment to the priority — both subject and object are prepared to defend it — and using the indicative to report Mary’s promise is licensed. By contrast, if Mary orders Bill to bring dessert, “the priority [of Bill’s bringing dessert] may be controversial, …and the object [Bill] may dispute it” (2012:473). Hence in (17) the indicative’s contextual commitment presupposition needn’t be satisfied, and using the subjunctive to report Mary’s order is required.

(Actually this last move is too quick: What about uses of ondinner where the object judges that what is ordered of him/her is appropriate, and the indicative’s contextual commitment presupposition is satisfied? Or uses of vouloir where the subject is prepared to defend her desires as reasonable? P/R explain the fact that indicative still isn’t licensed by positing that because the commitment condition “is not in general satisfied” with ondinner, vouloir, etc., the lexical items have become lexically associated with subjunctive (2012:481). We will return to this issue throughout the following sections.)

3 Challenges

This section raises challenges for P/R’s contextual commitment account of mood. The general concern is that P/R’s intuitive notion of commitment isn’t fit to explain
the full range of data. For clarity let’s refer to “commitment” in P/R’s sense, as analyzed in (14), with a subscript ‘PR’. Contextual commitment_{PR} fails to delineate the classes of indicative-selecting and subjunctive-selecting predicates.

3.1 Desideratives and doxastics

To get a better feel for how P/R are understanding commitment it will be helpful to consider several additional examples. P/R note the following further contrasts between ‘hope’ and ‘want’:

(18)  
a. He doesn’t fully realize it yet, but Ron wants to date Hermione.
   b. ??He doesn’t fully realize it yet, but Ron hopes to date Hermione.

(19)  
a. I want to marry Alice and I want to marry Sue.
   b. ??I hope to marry Alice and I hope to marry Sue.

(Portner & Rubinstein 2012: exs. 26–27)

P/R offer (18)–(19) as evidence against accounts which claim that what distinguishes ‘hope’ from ‘want’ is that ‘hope’ requires that the subject believes that the complement is possible: using ‘hope’ in the (b)-sentences is infelicitous even though the subjects believe the complements are possible. Instead P/R claim that using ‘hope’ is infelicitous because the subject isn’t committed_{PR} to the relevant preferences: (18b) is infelicitous since “commitment to a preference, in the relevant sense, requires being aware of it,” and (19b) is infelicitous “since it is impossible to be committed to inconsistent preferences” (2012: 471–472). These explanations are problematic.

Consider (19). Crucial for P/R’s purposes is that it be impossible to be committed_{PR} to conflicting preferences. If it were merely incoherent or irrational, the indicative presupposition could be satisfied. The presupposition requires that the subject be prepared to defend each preference as “reasonable and appropriate” (2012: 462) in any relevant conversation. One can imagine our torn lover in (19) saying, “There are good reasons for marrying Alice and good reasons for marrying Sue. I adore them both, and I’m sure I would be happy either way. What to do!” Such an attitude might incur a practical conflict. But it isn’t impossible.

Note the contrast with belief. Even if it is possible to have inconsistent beliefs, it is impossible to have inconsistent beliefs which are all correct, i.e. true (Stalnaker 1984). It is contentious whether something analogous holds with preferences. Correctness for preferences isn’t truth but desirability; roughly put, a preference is correct if its content is genuinely valuable, worth satisfying, etc. (e.g., Gibbard 1990, 2005, Piller 2006). As dilemmas with incomparable preferences (values, norms,
etc.) bring out, accepting inconsistent priorities might not only be possible but cor-

P/R’s treatment of (18b) raises problems for their treatment of croire ‘believe’. 
Croire is like espérer in selecting indicative. However, examples analogous to (18b) 
with ‘believe’ can be felicitous. (20) reports Bert’s implicit beliefs about women.

(20) [Context: Bert has an explicit conscious judgment that women are equally 
capable as men in the workplace. Yet he is also implicitly biased against 
women. A psychologist examining Bert’s results in an implicit attitudes ex-
periment says:]

Bert doesn’t fully realize it yet, but he thinks that women are less capable 
than men in the workplace, and that their proper place is in the home.

Reporting Bert’s implicit attitudes with ‘believe’ is felicitous even though Bert isn’t 
aware of them and isn’t disposed to defend them — indeed, even though Bert is dis-
posed to sincerely deny them.

Examples such as (20) with indicative-selecting predicates cannot be dismissed 
as exceptional. It is interesting that Williamson’s paradigm cases when introducing 
failures of transparency are precisely ‘believe’ and ‘hope’:

[O]ne is sometimes in no position to know whether one is in the mental 
state of hoping $p$. I believe that I do not hope for a particular result to a 
match; I am conscious of nothing but indifference; then my disappoin-
tment at one outcome reveals my hope for another… [Transparency] 
fails for the state of believing $p$, for the difference between believing $p$ 
and merely fancying $p$ depends in part on one’s dispositions to practical 
reasoning and action manifested only in counterfactual circumstances, 
and one in not always in a position to know what those dispositions are. 
(Williamson 2000: 24)

Williamson’s hoper isn’t prepared to defend the preferability of such-and-such team’s 
winning in any relevant conversation; for all he would say, he is indifferent. Examples like 
(18b) with ‘hope’ improve insofar as context makes clear one’s grounds for 
attributing the implicit attitudes to the subject, as in (21)–(22).

(21) TW hoped the Giants would win, but he didn’t fully realize it at the time.

(22) [Context: Same as (20)]

Bert doesn’t fully realize it yet, but he hopes his wife doesn’t end up getting 
the job, so that she can stay home with the kids.
The general felicity of examples like (20)–(22) poses a challenge for a general account of indicative-selection in terms of commitmentP/R to modal backgrounds.

P/R distinguish ‘want’ and ‘hope’ partly in terms of the kinds of preferences they describe. ‘Want’ describes “visceral” or “glandular” preferences; ‘hope’ describes “intellectual” preferences (2012: 471). Since “one cannot help one’s glandular-buletic preferences…, there’s no guarantee they will be defensible” (2012: 479) — hence subjunctive-selection with vouloir. These remarks are also in tension with P/R’s explanation of indicative-selection with croire. Belief is often not up to us. Take, for instance, your present occurrent belief that you are reading a paper. Here is Plantinga:

You ask me what I had for breakfast: I find myself believing that what I had for breakfast was a grapefruit. I am appeared to redly; I find myself with the belief that I am perceiving something red… In each of these cases (as in general), I have little or no direct or conscious control. (Plantinga 1993: 177)

Debates in philosophy and psychology have concerned whether any beliefs are voluntary (Alston 1988, Bennett 1990, a.m.o.).

P/R might reply that that even if we “cannot help” having many of our beliefs, we are still typically prepared to defend them. Examples such as (23)–(24) are perhaps the exception rather than the rule.

(23) [Context: Same as (20)]
   Bert thinks that women are less capable than men in the workplace, but he would deny it if you asked him.

(24) Fideist: I believe that God exists. I have no arguments; indeed my belief may even be contrary to reason. But I can't help but believe, any more than you can help believing that you are reading this example.

Likewise for (25) with ‘hope’.

(25) TW hopes the Giants will win, but he would deny it if you asked him.

The exceptionality of such examples might warrant treating croire and espérer as lexically associated with an indicative-licensing feature, and hence licensing indicative even when the commitmentP/R presupposition isn’t satisfied. Though P/R speculate that grammaticalized mood may only occur with subjunctive-selecting predicates, as mentioned in §2 concerning vouloir and ordonner (2012: 481–482), perhaps P/R might treat croire and espérer as cases of grammaticalized indicative.
However, appealing to lexical mood selection for the paradigm indicative-selecting and subjunctive-selecting predicates weakens the explanatory and predictive power of P/R’s commitment-based semantic definition of mood. We are typically prepared to defend our preferences as well as our beliefs; conversely, we sometimes have beliefs as well as preferences which we wouldn’t defend. P/R’s claims that the contextual commitment presupposition “is guaranteed to be satisfied [with croire], in virtue of the nature of believing events,” and that the presupposition “would not typically be satisfied [with vouloir], in virtue of the nature of wanting events” (2012: 477), are too strong. If we must treat paradigm mood-selecting predicates as involving grammaticalization, what predicts which mood the predicate will become lexically associated with? Given P/R’s contextual commitment account, one could just as easily have speculated (e.g.) that croire would be lexically associated with subjunctive: to parrot P/R’s remark quoted above (p. 479), “One cannot help one’s beliefs, and because of this, there’s no guarantee they will be defensible. Nevertheless, we may want to describe them, so a verb like ‘believe’ is essential.” I don’t deny that grammaticalization can be arbitrary. The question is whether specific choices in matters of mood selection are best explained in terms of P/R’s notion of commitment_{PR}.

Finally, P/R’s treatment of espérer vs. vouloir raises questions about mood selection with emotive factives (e.g., regretter ‘regret’, être heureux ‘be happy’). Uses of emotive factives imply that the subject believes the complement, and thus presumably that she committed_{PR} to the modal base that entails it. Further, there doesn’t seem to be anything necessarily “visceral” or “glandular” about the relevant preferences that might dispose the subject not to defend them. The attitudes described by emotive factives don’t in general seem any less “intellectual” than those described by espérer ‘hope’. Yet, emotive factives uniformly select subjunctive. It isn’t obvious how to explain this simply in terms of dispositions to defend modal backgrounds.

### 3.2 Commissives and directives

P/R explain the contrasting mood-selection properties of promettre ‘promise’ and ordonner ‘order’ in terms of whether the object need be committed_{PR} to the deontic ordering source: whereas both promisor and promisee must be committed_{PR} to what is promised, the object of an order needn’t be committed_{PR} to what is ordered; hence promettre selects indicative, and ordonner selects subjunctive.

Start with P/R’s account of promising. P/R follow Searle in treating successful acts of promising as requiring that the promisee view what is promised as preferable (2012: 473). Note that in order for the contextual commitment presupposition to be satisfied, it isn’t sufficient (or necessary for that matter) that the promisor believe
that the promisee would view what is promised as preferable; the promisee, as the object of promettre, must actually view what is promised as preferable. That is, one doesn’t count as promising unless the promisee is committedPR to the priority. This view is problematic. First, there are cases in which one erroneously believes that the promisee has an interest in what is promised, as in (26).

(26) Clara promised her dying father that she would spread his ashes over the Seine, not realizing that he actually wanted them spread over the Saône.

Intuitively, Clara didn’t merely try or intend to make a promise to her father; she actually did. In promises as threats the promisor even knows that the promisee wouldn’t defend the priority, as in (27).

(27) David promised his sister that he would make her life miserable.

It is precisely in making the promise — in committing to a course of action that his sister dispréferts that David threatens his sister. There may even be cases in which the subject of the promise doesn’t view what is promised as preferable, as in (28).

(28) I promised the terrorist that I would kill the other hostages if he held off his plan for ten minutes. But I knew that the police were on their way, and that it would never come to that. I would never do such a thing.

The subject in (28) might not be “prepared to defend” the preferability of killing the hostages in any conversation.

As in our discussion of ‘believe’ and ‘hope’ in §3.1, P/R might reply that examples such as (26)–(28) are exceptional cases of promising. P/R might posit that insofar as the contextual commitmentPR condition is generally satisfied with promettre, promettre has become lexically associated with indicative mood. However, this again weakens the predictiveness of the account. Unlike ‘believe’ and ‘hope’, whose mood-selection properties vary across languages, indicative-selection with commissives such as ‘promise’ is cross-linguistically robust.

Now turn to P/R’s claims about the differences in contextual commitmentPR between promising and ordering. There are two potential issues concerning commitment which aren’t clearly delineated in P/R’s discussion (2012: 472–473, 480–481): (i) whether, upon performance of the utterance, it need be presupposed that the subject/object is prepared to defend the priority as preferable; and (ii) whether, upon performance of the utterance, the promise/order is “automatically in effect” (2012: 473) — i.e. whether the priority is automatically added to the deontic ordering source. Neither way of understanding contextual commitmentPR captures the
mood-selection contrasts between commissives and directives. (More on this issue in §§3.3–3.4.)

P/R are of course correct that one can be ordered to do something one doesn’t think is preferable. So, on the one hand, if P/R take the relevant sense of commitment\_PR to be as in (i), I agree that ‘order’ doesn’t presuppose contextual commitment\_PR in this sense. However, as illustrated above, neither does ‘promise’.

On the other hand, if P/R take the relevant sense of commitment\_PR to be as in (ii), it is no longer clear that directives don’t presuppose contextual commitment\_PR. Following Portner’s seminal work on the issue, imperatives and performative uses of directive verbs are often taken as directly updating the addressee’s To-do List, the set of acts she is contextually committed to performing (Portner 2004, 2007; cf. Ninan 2005, Portner 2009, Charlow 2011, a.o.). This reflects the oft-observed anomalosity of sentences such as (29).

(29)  a. Leave! — #even though I know you won’t.
     b. #Mary must leave now, but I know she won’t. (Portner 2009: 190)

Using an imperative commits the addressee to the priority in the sense of committing her to (intending to) satisfy it, at least for the purposes of conversation (assuming any other presuppositions of the directive are satisfied, e.g. that the speaker has relevant authority regarding the order). Indeed in Portner’s and Rubinstein’s broader work, imperatives and strong necessity modals are explicitly treated as presupposing contextual commitment\_PR (see also Rubinstein 2012). But if directive verbs report issuances of directives and issue directives themselves in performative uses, one is left wondering why they would differ from other directive constructions with respect to contextual commitment\_PR.

Analogous concerns arise for related predicates such as permettre ‘permit’. On the one hand, ‘permit’ would seem to be like ‘promise’ in that the permitter and permittee typically both regard what is permitted to be of value to the permittee. One usually permits people do things they would want to do, as in (30). Examples such as (31) are typically anomalous.

(30) Elaine’s mother permitted her to go to the party.
(31) #I permit you to go to the library, but I know you don’t want to.

On the other hand, also like ‘promise’, there are cases in which the subject or object of ‘permit’ doesn’t find what is permitted to be preferable, as in (32)–(33).
(32)  [Context: Elaine wants to go to the party later, instead of visiting her grandmother like she said she would. Elaine’s mother would prefer that she not go to the party.]
Elaine’s mother permitted her to go to the party, but it was really a test to see if Elaine would choose on her own to visit her grandmother.

(33)  She permitted him to stay for dessert, not realizing that he was already full and wanted to leave the table.

What, then, would P/R predict about the mood-selection properties of permettre? Would they treat examples like (30) as the norm and predict that permettre (grammatically) selects indicative, as with promettre? Or would they predict that “Because the commitment condition… is not in general satisfied with” permettre, given examples like (32)–(33), permettre grammatically selects subjunctive, as with ordonner? In fact permettre patterns with ordonner in uniformly selecting subjunctive. Saying that this is explained in terms of contextual commitmentPR seems ad hoc.

3.3 Fiction verbs

Fiction verbs (‘dream’, ‘imagine’, ‘fantasize’) generally select indicative across languages. This is puzzling from the perspective of traditional accounts of mood selection in terms of realis/irrealis, since the contents of dreams, imaginings, etc. don’t generally correspond to reality. Though P/R don’t explicitly discuss indicative-selection with fiction verbs in French, their remarks on veridicality suggest an explanation in terms of contextual commitmentPR:

Thinking about the indicative in terms of contextual commitment captures the persistent intuition in the literature that indicative-selecting attitudes take into account all the relevant things that an attitude holder takes to be true — be it in reality, in the context of a dream, or in a conversation (Farkas 1992; Giannakidou 1994, 1995, 1997, 1999; Quer 2001). An attitude holder would defend all and only those propositions that he or she thinks accurately describe the relevant “reality”, and thus there is an overlap between Giannakidou’s notion of veridicality and contextual commitment to epistemic backgrounds. (Portner & Rubinstein 2012: 482; first italics mine)

P/R’s response here is too quick.

As in the discussion of commissives/directives, there is a potential ambiguity concerning the relevant locus of commitment. Distinguish (i) commitment to the
specific content of a modal background, and (ii) commitment to thinking that a
modal background correctly represents the relevant information or priorities. As we
have seen, P/R are explicit in treating indicative as requiring sense-(i) committment$_{PR}$:
one must be prepared to defend the propositions in the modal base and ordering
source as “rational/proper/sensible/wise” (cf. 2012: 475, 477–481).³ It is unclear
how the subjects of fiction verbs satisfy this condition. Suppose I imagine a world
with unicorns, flying pigs, etc., so that the modal base for ‘imagine’ in (34) includes
propositions that there are unicorns, that there are flying pigs, etc.

(34) J’ai imaginé que les cochons volent.
I have imagined that the pigs fly.

‘I imagined that pigs fly.’

I am not prepared to defend that there are unicorns, that there are flying pigs, etc. “in
any relevant conversation.” I might not even be prepared to do so while I am imag-
ing. Yet these are the “propositions that [I think] accurately describe the relevant
‘reality,’” i.e. what I am imagining.

I am prepared to defend that the propositions that there are unicorns, etc. ac-
curately describe my imaginings, or the “reality according to the dream.” But this is
sense-(ii) commitment. The problem is that the individual arguments of subjunctive-
selecting verbs satisfy the commitment condition in this sense too. The subject of vouloir in (35) may not be prepared to argue that her “glandular preference” for a
cigarette is reasonable; she lacks sense-(i) commitment$_{PR}$. But she is prepared to ar-
gue that an ordering source which includes the proposition that she has a cigarette
correctly describes her glandular preferences; she has sense-(ii) commitment.

(35) [Context: You are at your doctor’s office for a checkup. He tells you what
bad shape your lungs are in. If you continue to smoke, you will soon die.]

Oh gosh, Doctor, with all this stress I really want/??hope to have a cigarette

³Although P/R are explicit in treating commitment$_{PR}$ as commitment to the propositions in the
modal base or ordering source, there is a further potential complication in cases where one is uncer-
tain about the specific content of a modal background at the evaluation world. For instance, suppose
one endorses whatever the Pope demands, but one is unsure what he has actually demanded. One
might not be prepared to defend the specific propositions in $g_{pope}(w)$ as “rational,” etc., yet intuitively
one is still committed$_{PR}$ to the modal background representing the Pope’s demands. P/R might revise
the account of commitment$_{PR}$ to require having corresponding conditional dispositions — e.g., a dis-
position to defend $p$ given that the Pope said $!p$. Yet this move would undermine their account of the
anomalousness of (18b), in which they “assum[e] that commitment to a preference, in the relevant
sense, requires being aware of it” (2012: 471–472).
as soon as I leave!

Likewise the subject in [36] may think that it is impossible to build a perpetual motion machine, and thus not be prepared to “argue in favor of all of the propositions which would need to be in the [modal base] in order for [36] to be true” (2012: 479). But she may still be prepared to argue that such propositions accurately describe the “reality according to her glandular desire,” or how the world would need to be for a perpetual motion machine to be possible.

(36) I want/hope to build a perpetual motion machine.

Sense-(ii) commitment amounts to nothing more than the general Quality commitment that what one is saying is true.

P/R aren’t alone in having issues explaining indicative-selection with fiction verbs. It is common in the literature to treat fiction verbs as analogous to other indicative-selecting verbs in representing a “reality,” albeit a fictional one. Giannakidou expresses the idea well:

When I dream or imagine something, as a dreamer, I am fully committed to the fictional reality of my dream… fictional reality replaces the actual one…: dream shifts the model of evaluation… to the [model of the dreamer, i.e. the set of worlds compatible with the subject’s dream]. All worlds in that space are p worlds, since reality no longer plays a role… This suggests that the grammar treats fictional contexts as shifted, non-partitioned states where veridicality holds as if in the real world. Hence, dream and fiction verbs are subjectively… veridical. (GIANNAKIDOU 2016: 21–22)

This is unexplanatory. Any modal background characterizes a set of “best worlds” at which a proposition may be true or false. One’s desires, e.g., characterize a set of worlds that best satisfy one’s desires, a “desire model” representing “the ideal reality of one’s desires.” Why, then, do natural languages systematically treat “fictional realities,” but not “ideal realities” of subjects’ desires, as relevantly like actuality? Or treat dreaming, but not wanting, as generally involving a kind of “commitment” relevantly like the commitment in (say) knowing? Intuitive appeals to fictional realities,
or commitment “in the context of a dream,” are insufficient. We need an account of the operative notions of “reality” or “commitment” that explains the relevant similarity between fiction verbs and other indicative-selecting verbs.

3.4 Commitment and modal strength

In closing their discussion P/R suggest that contextual commitment may also help explain various linguistic phenomena beyond mood selection, in particular differences in strength among necessity modals (Portner & Rubinstein 2012: 484). This section briefly compares the role of contextual commitment$_{PR}$ in P/R’s account of mood selection with its role in Rubinstein’s (2012) account of the distinction between weak and strong necessity modals. As in the previous subsections, I will argue that a uniform notion of contextual commitment$_{PR}$—commitment to defending the specific propositions in the modal base and ordering source—fails to capture the data. (See Silk 2012a, b for further discussion.)

There is robust evidence supporting a distinction in strength among necessity modals, with so-called “weak” necessity modals (‘ought’, ‘should’, ‘be supposed to’), on the one hand, and “strong” necessity modals (‘must’, ‘have to’, ‘be required to’), on the other. For instance, (37a) is consistent in a way that (37b) is not.⁸

(37)  a. I should help the poor, but I don’t have to.
    b. #I must help the poor, but it’s not as if I should.

There are also important conversational differences. Rubinstein (2012) argues that what makes weak necessity modals “weak” is that they are interpreted with respect to priorities assumed not to be collectively committed$_{PR}$ to in the conversation. (Rubinstein doesn’t examine epistemic modals.) Strong necessity modals presuppose contextual commitment$_{PR}$ to the relevant modal backgrounds; weak necessity modals presuppose a lack of contextual commitment$_{PR}$.⁹ For instance, in (38) the weak necessity modal ‘should’ is interpreted with respect to a priority favoring cost-effectiveness. Though the speaker may be committed$_{PR}$ to this priority, it isn’t presupposed that the addressee, Alice, is committed$_{PR}$ to it (cf. Rubinstein 2012: 55–60).

(38)  [Context: Alice wants to go to Harlem and is considering whether to take the subway or a cab. The subway is cheaper, but the cab is quicker.]

---

⁸See Silk 2012a for additional data and extensive references.
⁹Rubinstein’s (2012) claim that weak necessity modals presuppose a lack of commitment$_{PR}$ is stronger than P/R’s (2012) claim about the subjunctive that it lacks a presupposition of commitment$_{PR}$.
You should (have to, must) take the A train.

This lack of contextual commitment is what calls for using 'should', on Rubinstein’s view.

Rubinstein is explicit that the relevant notion of commitment is commitment to the content of a modal base or ordering source — i.e., sense-(i) commitment from §§ 3.2–3.3. Commitment to a priority \( p \) is treated as endorsement of \( p \) as desirable (see, e.g., Rubinstein 2012: 78). However, as in P/R's account of mood selection, this notion of commitment doesn’t capture all the data. The weak/strong necessity distinction cuts across the distinction between modals that express contextual commitment and those that express a lack of commitment.

First, there are uses of weak necessity modals that involve collective endorsement to a priority. In (39) the interlocutors are both expressly committed to the value of family; both would defend the value as “rational/proper/sensible.” Yet ‘should’ is felicitous, indeed preferred.¹⁰

(39) [Context: You are considering whether to fight in the Resistance or take care of your ailing mother.]

You: Family is very important. I think I would rather stay here.

Me: I agree. You should/ought to take care of your mother.

(cf. Silk 2015: ex. 9)

Second, there are uses of strong necessity modals in which the individuals expressly reject commitment to the relevant priorities; the lack of endorsement can even be common ground, as in (40).

(40) [Context: We’re teenage siblings. It’s 10:30 p.m., and we plan on staying out and going to a party. We know our parents are already asleep.]

You: When is curfew, again? We need to make sure that we tell Mom we got back before then if she asks.

Me: We have to be home by 11. Aren’t her rules stupid? C’mon, let’s go.

The putative contextually presupposed priorities and additional priorities can all be rejected as undesirable, as in (41).

(41) [Context: A and B are in an anti-terrorist training session on explosives. A is wondering about the most effective way of setting up a bomb so as to

¹⁰For related examples and discussion, see Woisetschläger 1977: ch. 5; McNamara 1990: ch. 3; Silk 2012b.
inflict maximum damage. B says:

You should/have to use the nails and set it off during rush hour.

Counterexamples such as [39]–[41] aren’t atypical. Corpus studies uniformly confirm that there is variation among necessity modals in both classes vis-à-vis tendencies to express contextual commitment\(^{PR}\). Contextual commitment\(^{PR}\) has even been appealed to in distinguishing among weak necessity modals, and among strong necessity modals.\(^8\) For instance, summarizing his corpus analyses of ‘ought’ and ‘should’ in contemporary American English, Myhill concludes that “using ought suggests that people have the same feelings about the specific obligation in question and there is agreement about it, while should does not suggest the same feelings or agreement” (1997: 8). Far from being an exception, examples like [39] expressing contextual commitment\(^{PR}\) with ‘ought’ are the norm, as in the naturally occurring example in [42].

\begin{verbatim}
(42) A:  I won’t tell anyone… but the Dean, of course.
     B:  And Mrs. Reynolds.
     A:  Yes. She ought to know.

cf. Myhill 1997: ex. 18; slightly modified
\end{verbatim}

Conversely, though ‘must’ tends to be associated with contextual commitment\(^{PR}\), other strong necessity modals such as ‘(have) got to’ do not. ‘(Have) got to’ is distinguished in being “associated with conflicts between the speaker and the listener” (Myhill 1996: 365), as in the naturally occurring example in [43].

\begin{verbatim}
(43) Edie, you’ve got to stop bothering me when I’m working.

Myhill 1996: ex. 81
\end{verbatim}

Contextual commitment\(^{PR}\) may indeed affect the distribution of modals in discourse, but it isn’t what explains the distinction between weak and strong necessity modals. Like with the cases of mood selection, it isn’t commitment to the content of modal backgrounds that explains differences in strength among necessity modals.\(^{12}\)


\(^{12}\) See Silk 2013 for my preferred account of the weak/strong necessity modal distinction, and an alternative take on Rubinstein’s data concerning contextual commitment.
3.5 Recap

Let’s recap. P/R claim that indicative-selecting verbs in French are precisely those which presuppose contextual commitment\textsubscript{PR} to the verb’s modal backgrounds, in the following sense: they presuppose that every individual argument of the verb is prepared to defend the information, preferences, etc. in the modal base/ordering source as reasonable. I have argued that this understanding of “contextual commitment to a modal background” doesn’t capture the contrasting mood-selection properties of espérer/vouloir and of promettre/ordonner, or indicative-selection with croire and verbs of fiction. Pace P/R, it isn’t in “the nature of” believing, hoping, promising, etc. that the subjects/objects need be disposed to defend the facts or priorities in question “in any relevant conversation” (2012: 477). I have suggested that P/R might respond by revising their view and treating the indicative-selecting predicates as grammatically associated with indicative, as P/R propose with certain subjunctive-selecting predicates. However, positing such more extensive grammaticalization of mood-selection weakens the explanatory and predictive power of P/R’s notion of contextual commitment\textsubscript{PR} — in particular, concerning the central puzzle cases which the account was designed to explain.

4 Mood selection and states of mind

This section develops an alternative account of mood selection in French. With P/R, I agree that mood selection fundamentally depends not on attitudes about the truth-value of the complement, but on a relation between individuals’ attitudes and the predicate’s modal backgrounds. However, I deny that this relation is commitment\textsubscript{PR} in P/R’s sense. To a first approximation, I propose that indicative mood presupposes that any modal backgrounds used in evaluating the clause are entailed by the modal backgrounds representing the clause’s local context. Indicative-selecting attitude predicates “presuppose commitment,” not in the sense of presupposing a commitment to the truth of the complement or presupposing a disposition to defend the reasonableness of the propositions in the predicate’s modal base/ordering source, but in the sense of presupposing that the predicate’s modal backgrounds are entailed by the modal backgrounds representing the attitude state. This view captures the central puzzle cases of mood selection from §3, and provides an improved treatment of the additional examples from §3 that posed challenges for P/R.
4.1 Background and analysis

I start by explicating how I understand the relations among discourse contexts, local contexts set up by attitude predicates, and states of mind. It is common to include in a model of context a parameter representing the information taken for granted for the purposes of conversation. This background information, or common ground (CG), delimits the set of live possibilities in the discourse, i.e. the worlds among which the participants intend to distinguish, or context set (CS = \( \cap \) CG) (\text{Stalnaker} 1978, 2014, \text{Clark} 1996). In making assertions we winnow down the context set and settle on a more complete picture of the world. Yet conversation doesn’t just involve sharing information. Inquiry is, in part, inquiry about what to do. It is thus also common to include a parameter representing (roughly) the norms or priorities accepted for purposes of conversation (e.g., \text{Lochbaum} 1998, \text{Portner} 2004, 2007, \text{Charlow} 2011). These contextual parameters determine an ordered set (CS, \( \preceq \) CP) — the set of live possibilities CS ordered in light of the accepted body of priorities CP (n. 3). This represents the global discourse context, the body of information and priorities presumed available for communication.

It is well-known that many embedding environments introduce local (derived, subordinate) contexts. These local contexts can provide a basis for interpreting embedded material, as in an attitude complement, supposition, or question. In (44), for instance, the use of ‘Ursula’ (‘the unicorn’) is felicitous even though the presupposition that a suitable discourse referent exists isn’t “globally satisfied,” or entailed by the discourse common ground.

(44) There are no unicorns, but Fred thinks there are. In fact, he thinks he has a pet unicorn named ‘Ursula.’ He thinks Ursula (/the unicorn) can fly.

The existence presupposition associated with ‘Ursula’ (‘the unicorn’) is, however, satisfied in the expression’s local context, i.e. the context representing (what is presupposed about) Fred’s beliefs (\text{Stalnaker} 1988, 2014, \text{Heim} 1992, \text{Geurts} 1998).

---

13Portner associates each conversational participant with her own To-do List, and treats the elements of To-do Lists as properties. I will simplify by treating contextual bodies of priorities, like ordering sources, as sets of propositions. There may be reasons to treat this normative parameter as a sequence, representing different types of priorities that may be relevant in the conversation (cf. \text{Portner} 2007). Given our purposes I bracket this potential complication. I also bracket an additional parameter for the Question Under Discussion (QUD), which would induce a partition on the context set (\text{Roberts} 1996, \text{Ginzburg} 2012).

14Though common in dynamic approaches to presupposition, positing local contexts is neutral between static/pragmatic implementations (\text{Stalnaker} 1974, 2014) and dynamic semantic implementations (\text{Heim} 1990) (for extensive recent discussion, see \text{Schlenker} 2009, 2010).
Local accommodation not only allows one to use ‘Ursula’ ('the unicorn') in (44) without presupposition failure. It also guides how the expression is interpreted.

It is contentious how to formalize a general notion of local context. What is important for our purposes is simply that concrete attitudes are like concrete discourse contexts in being representable by abstract objects which determine semantic values for context-sensitive expressions (e.g., providing salience orderings, domain restrictions, modal backgrounds, etc.), and that the local contexts figuring in the interpretation of attitude ascriptions represent concrete states of mind (perhaps among other things). For simplicity I will assume that abstract local and global contexts are the same kinds of formal objects. Given the above discussion, this amounts to representing local and global contexts in terms of a pair of modal backgrounds for accepted information and priorities. For a global discourse context, the relevant information is $CG$ and the relevant priorities are $CP$, yielding an ordered set of live possibilities $(CS, ≤_{CP})$. For a local context, the relevant backgrounds are determined by the kind of embedding expression. For a speech-act predicate, the modal backgrounds would be those representing the reported speech event — the presupposed information and priorities, respectively, of the reported discourse. For an attitude predicate, narrowly construed (n. 1), the modal backgrounds would be those representing the subject’s state of mind in the attitude event; for instance, the information might be the subject’s propositional beliefs $DOX$, and priorities the subject’s preferences (norms, values, etc.) $N$, yielding an ordered set of doxastic alternatives $(\bigcap DOX, ≤_N)$.

I proposed above that what distinguishes indicative-selecting predicates in French is a presupposition about the relation between the modal backgrounds figuring in the predicate’s semantics and the modal backgrounds representing the local context set up by the predicate. How exactly one formalizes the account will depend on one’s broader views about the morphosyntax and semantics of the embedding predicates and of the root and embedded clauses. For concreteness I will follow P/R in treating mood morphemes in complement clauses as licensed by mood features adjoined to the embedding predicate, as reflected in (45)–(46).

      Alice thinks that Blanche be-indic vegetarian

This assumption may be complicated by independent issues with quantifiers. There may be reasons for treating local contexts in terms of a relevant mix of information/priorities from the global context and the subject’s attitude state (see Stalnaker 1988, 2013, Heim 1992, Geurts 1998, Swan-son 2011b for discussion). Such complications shouldn't affect the substance of the points to follow.
The indicative feature, [+ind], presupposes that \( (\bigcap f(x, w), \preceq_{g(x, w)}) \), used in the compositional evaluation of the complement clause, is a subpreorder of \( c_P \), where \( f \) and \( g \) are the predicate's modal backgrounds and \( c_P \) is the local context representing the local context set up by \( P \), as reflected in (48). (I continue to assume the modal backgrounds for attitude predicates take individual arguments.) The subjunctive feature, [+sbjv], appears when other more contentful mood features, such as [+ind], are unavailable; in this sense it is semantically unmarked and serves as a semantic default (cf. Portner 1997, Schlenker 2005, Marques 2009, Siegel 2009).

### 4.2 Applications

This section applies the proposal in §4.1 to the central puzzle cases discussed in §§1–3. For reasons of space I won't be able to address every example here. The following explanations should give a feel for how the account may be applied more generally.

#### 4.2.1 Indicative-selection with croire

Croire ‘believe’ is associated with a doxastic modal background \( f_{bel} \) that represents the subject's beliefs about the world. (Croire might also be associated with an ordering source representing the subject's broadly evaluative beliefs, as may be relevant for evaluating complements with (e.g.) deontic modals; however, since all our examples with croire involve prosaic non-normative beliefs, we can suppose for simplicity that the ordering source \( g_{bel} \) is empty.) As an attitude verb, croire sets up a local context \( c_{loc} \) that represents the subject's state of mind in the attitude event (§4.1). For a belief event this is the subject's doxastic-evaluative state of mind, namely \( c_{loc} = (\bigcap DOX_{x, w}, \preceq_{N_{x, w}}) \), where \( DOX_{x, w} \) represents \( x \)'s beliefs in \( w \) and \( N_{x, w} \) represents \( x \)'s norms (preferences, values, etc.) in \( w \). Hence the presupposition of [+ind] is invariably satisfied: \( (\bigcap f_{bel}(x, w), \preceq_{\emptyset}) \subseteq c_{loc} \). So, given a principle such as...
Maximize Presupposition! (Heim [1991]). 

This account of croire avoids the difficulties with P/R's account discussed in §3.1 as concerning examples such as [20] 

(50) [Context: Same as [20]]

a. Bert doesn't fully realize it yet, but he thinks that women are less capable than men in the workplace, and that their proper place is in the home.

b. Bert thinks that women are less capable than men in the workplace, but he would deny it if you asked him.

The indicative presupposition in (48) doesn't require that the subject be disposed to argue for the propositions in \( f_{bel}(x, w) \). Rather it requires that the predicate's modal background be entailed by the background representing the subject's state of mind, here that \( \bigcap f_{bel}(x, w) \subseteq DOX_{x,w} \). Whether the subject is introspectively aware of her state of mind, and how she would be disposed to act in light of her state of mind, are other matters.

4.2.2 Indicative-selection with fiction verbs

The above approach to indicative-selection with croire can be extended straightforwardly to fiction verbs. For instance, rêver 'dream' is associated with a modal background \( f_{dream} \) that represents the content of the subject's dreams. (We can suppose again for simplicity that the ordering source is empty.) As an attitude verb rêver also sets up a local context that represents the subject's state of mind in the attitude event. With rêver this is the subject's state of mind in the dreaming event. Hence the presupposition of \([+_ind]\) is invariably satisfied: \( (\bigcap f_{dream}(x, w) \subseteq DOX_{x,w}) \subseteq c_{loc} \). The account of mood selection from §4.1 gives precise expression to intuitive appeals to "fictional realities," or commitment "in the context of a dream," in previous accounts.

4.2.3 Indicative-selection with espérer vs. subjunctive-selection with vouloir

Espérer 'hope' and vouloir 'want' are both desire verbs, though espérer selects indicative and vouloir subjunctive. We can derive this contrast in mood selection from independently motivated differences in the verbs' semantics and general principles of interpretation.

16Roughly put: that when sentences S and S' are contextual alternatives with the same asserted content and S' has stronger presuppositions, S' ought to be used.
Start with *vouloir* ‘want’. Examples such as (51) from Irene Heim — or its French analogue in (52) — indicate that wanting \( p \) is compatible with being certain that \( p \).

(51) (John hired a babysitter because) he wants to go to the movies tonight.

(52) Jean a embauché une baby-sitter parce qu’il veut que nous allions au cinéma.

As Heim notes, (51) is compatible with John’s being certain about whether he will go to the movies tonight. If the modal base for ‘want’ was identified with the subject’s beliefs, every world in \( \bigcap f_{\text{want}}(x, w) \) would be a world in which John goes to the movies. However, this violates general principles about the interpretation of modals. It is common in literatures on various types of modals to posit a “diversity” condition on modal bases in order to avoid trivialities in the calculation of truth-conditions (e.g., Frank 1996, Condoravdi 2002, Werner 2003). For present purposes we can treat such a condition as requiring that any non-empty ordering source non-trivially distinguish among worlds in the modal base with respect to the prejacent — formally, that, for any non-empty ordering source \( g(w) \), there are \( p \)-worlds \( u \) and \( \neg p \)-worlds \( v \) in \( \bigcap f(w) \) such that either \( u \not\equiv g(w) \lor v \not\equiv g(w) \lor u \). Since *vouloir* ‘want’ takes an ordering source representing the subject’s desires, the felicity of (51)/(52) shows that \( f_{\text{want}} \) cannot be identified with the subject’s beliefs, lest the diversity condition be violated. This leads Heim to treat the modal base \( \bigcap f_{\text{want}}(x, w) \) as a superset of the subject’s doxastic alternatives — specifically, as representing what the subject believes to be the case no matter how she chooses to act (Heim 1992: 199). So, \( \bigcap f_{\text{want}}(x, w) \not\subseteq \bigcap \text{DOX}_{x, w} \) and the presupposition of \([+_\text{ind}]\) is violated. Subjunctive-selection with *vouloir* can be derived from independently attested features of the predicate’s modal backgrounds and a general diversity condition on modal bases.

This derivation of subjunctive-selection with *vouloir* captures subjunctive-selection with related expressions of intention, like *l’intention est que*, as in (53).

(53) L’intention est qu’il aille au cinéma.

The intention is that he go.SBJV to the movies.

Following Heim (1992: 199), the modal base for expressions of intention \( \bigcap f_{\text{int}}(x, w) \) is like the modal base for ‘want’ in being a superset of the relevant doxastic alternatives \( \bigcap \text{DOX}_{x, w} \). Like (51), (54) is felicitous even if John is certain that he will go
to the movies tonight (assuming he isn’t certain that he will go no matter what he chooses to do).

(54) John intends to go to the movies tonight. (Heim 1992: 199)

This correctly predicts subjunctive-selection.

Subjunctive-selection with expressions of intention poses a challenge for P/R’s contextual commitment account. It is hard to see why a subject wouldn’t be prepared to defend what she intends to do.

These examples highlight an important contrast between ‘want’/’intend’ and ‘hope’. Whereas (51)/(52) is felicitous even if John is certain about whether he will go to the movies, (55)/(56) with ‘hope’ is not.

(55) ??(John hired a babysitter because) he hopes to go to the movies tonight.
(56) ??Jean a embauché une baby-sitter parce qu’il espère que nous allons au cinéma.

This makes sense on the hypothesis that the modal base for ‘hope’ is the subject’s beliefs. Since ‘hope’ takes an ordering source representing the subject’s desires, the diversity condition requires that there be some ¬p-worlds in the modal base. Treating \( f_{\text{hope}} \) as DOX correctly predicts that (55)/(56) implies that John is leaving open the possibility that he might do something other than go to the movies later — hence the infelicity in the given context. Indeed we already saw evidence for treating the modal base for ‘hope’ in this way in §3.3: (57) is anomalous if the subject thinks that building a perpetual motion machine is impossible.

(57) ??I hope to build a perpetual motion machine.

Treating \( f_{\text{hope}} \) as DOX reflects the common idea that ‘hope’-ascriptions require that the subject believe that the complement is possible.\(^{17}\)

---

\(^{17}\)P/R report finding the analogous example in (i) with ‘want’ to be felicitous.

(i) I want to build a perpetual motion machine.

The present account of mood selection doesn’t itself exclude this judgment: for all that matters relevant to mood are concerned, \( \bigcap f_{\text{want}}(x, w) \cap DOX_{x, w} \) might include worlds in which one builds a perpetual motion machine. However, I myself find (i) anomalous, and prefer ‘wish’ or ‘would like’ in scenarios where the subject doesn’t believe that the complement is possible (cf., e.g., Heim 1992, Giorgi & Pianesi 1997, Schlenker 2005 reports similar judgments for French. For these latter di-
So, examples such as (55)–(57) provide independent support for treating the modal base \( f_{\text{hope}} \) as representing the subject's beliefs. Since the ordering source \( g_{\text{hope}} \) represents the subject's desires, which are a subset of the subject's accepted priorities \( N \), the presupposition of \([+_{\text{ind}}]\) is satisfied. The ordered set \((\bigcap f_{\text{hope}}(x, w), \not\subseteq g_{\text{hope}}(x, w))\) determined by the predicate's modal backgrounds is included in the representation of the subject's overall doxastic-evaluative state of mind, \((\bigcap \text{DOX}_{x, w}, \not\subseteq N_{x, w})\), constituting the predicate's local context. So, espérer selects indicative.

This account of indicative-selection with espérer and subjunctive-selection with vouloir helps capture the relevant contrasts in §§2–3. First, recall (15)–(35), reproduced in (58)–(59). (For space purposes I only include the English translations.)

(58) [Context: Same as (15)]
  a. ??But you hoped for him to be killed!
  b. But you wanted him to be killed!

(59) [Context: Same as (35)]
  a. ??Oh gosh, Doctor, with all this stress I really hope to have a cigarette!
  b. Oh gosh, Doctor, with all this stress I really want to have a cigarette!

In typical contexts for (58) it would be assumed that, given the king's authority, if the king wants something to get done, it gets done (or at least assumed that the king takes himself to have such authority). So, since the king desires to have the bishop killed, it would be assumed — at least for purposes of conversation — that the king believes that the bishop will get killed. So, \( \bigcap f_{\text{hope}}(x, w) \subseteq p \), violating the diversity condition — hence the infelicity of (58a) with 'hope'. Likewise for (59a): The context suggests that the subject is assuming — at least for purposes of conversation — that she won't in fact have a cigarette when she leaves. So, \( \bigcap f_{\text{hope}}(x, w) \subseteq \neg p \), and diversity is violated. By contrast, since the modal base \( \bigcap f_{\text{want}}(x, w) \) includes worlds

one could posit an additional lexical constraint on \( f_{\text{want}} \) — e.g., following Heim, by identifying \( f_{\text{want}}(x, w) \) with the subject's beliefs about how the world is independent of her intentions or choices. Such a move is supported not only by examples like Heim's (51), but also by the relative felicity of (ii) in comparison to (i).

(ii) John is going to his in-laws tonight, but he wants to go to the movies instead.

Alternatively, one could attempt to derive the apparent implication of 'want' that the subject believes the complement is possible as an implicature arising from competition with 'wish' (or, in French, the conditional form of vouloir, e.g. voudrait), which typically carries the counterfactual implication that the subject believes \( \neg p \). We needn't take a stand on this issue about the lexical semantics of vouloir 'want' here. What is important for our purposes is simply that the modal base of vouloir can include worlds outside the subject's doxastic alternatives.
outside the subject’s doxastic alternatives, the diversity condition can be satisfied in the (b)-examples with ‘want’. The modal base in (58b) includes worlds that differ with respect to the bishop’s being killed, and the modal base in (59b) includes worlds that differ with respect to the patient’s having a cigarette. Given the subjects’ respective desires, the ‘want’-ascriptions can thus be felicitous and true.

This diagnosis assimilates the contrasts in (58)–(59) to the contrast between (51) and (55). Yet we saw in §§2–3 that P/R treat the infelicity of ‘hope’ in (58)–(59) in terms of the subject’s unwillingness to defend the desires in question. The present account of mood is compatible also with explaining contrasts in terms of differences in ordering source: the indicative presupposition is violated if ≲_{\text{want}(x,w)} relates worlds in ways not specified by the subject’s overall priorities ≲_{N_x,w}. However, the felicity of ‘hope’ in the alternative contexts in (60)–(61) speaks against this latter strategy (at least for the specific examples in (58)–(59)); the contexts in (58)(59) and (60)(61) are equivalent vis-à-vis the relevant ordering source and the subject’s commitments to the relevant desires.

(60) [Context: The king writes in his private journal about how annoyed he is with the bishop. Unbeknownst to the king, the knights stumble across the journal, read the entry about the bishop, and go ahead and kill him. When the king hears about it, he is angry. The knights say:]

But you hoped he would die!

(61) [Context: In your last appointment the doctor told you that if you continued to smoke, you would soon die. At the time you were out of cigarettes, and you weren’t sure whether you would be able to get more after leaving the office. In your next visit, you recount your experience and say:]

With all the stress I really hoped to have a cigarette as soon as I left!

The above modal-base explanation correctly predicts that the ‘hope’-ascriptions should improve in contexts where the subject isn’t assumed to have a specific belief about the complement, as in (60)–(61).

The contrast between ‘hope’ and ‘want’ in (19), reproduced in (62), may call for additional resources.

(62) a. ??I hope to marry Alice and I hope to marry Sue.

b. I want to marry Alice and I want to marry Sue.

Suppose we give espérer ‘hope’ the semantics of an ordinary necessity modal:
Such a semantics correctly predicts the inconsistency of (62a). Assuming there isn’t a relevant intra-sentential context shift concerning the relevant desires hope, conjunctions of the form ‘x hopes p and x hopes q’ for (contextual) contraries p and q, cannot be (non-vacuously) satisfied. However, the same would hold with vouloir ‘want’, assuming it is also given an ordinary necessity semantics like (63) regardless of whether the modal base $\cap f_{hope}(x, w)$ includes worlds outside the subject’s doxastic alternatives, if the modal base and ordering source are held constant in each conjunct. (62b) will be predicted to be just as contradictory as (62a). This suggests that the contrast between (62a)–(62b) isn’t simply due to a difference in verbal mood.

Fortunately there is independent evidence for treating ‘want’ as a mid-strength modal, rather than an ordinary necessity modal (see Horn 1989, Lassiter 2011). There are various ways of capturing intermediate modal strengths that allow for the consistency of dilemmas like (62b). For instance, consider the truth-conditions for vouloir in (64), adapted from Eric Swanson’s (2011a) semantics for the weak necessity modal ‘ought’ (cf. van Fraassen 1973, Silk 2012a). (A $\leq$ chain is a totally preordered subset of a partial preorder $\leq$ of a set of worlds; a maximal $\leq$ chain is a $\leq$ chain that is not a proper subset of any other $\leq$ chain.)

(64) $\left[ x \text{ vouloir } p \right]^w = 1$ iff there is some maximal $\leq_{g_{want}(x, w)}$ chain, S, such that $[p]^w = 1$ for every $\leq_{g_{want}(x, w)}$-minimal world $w'$ in $S \cap f_{want}(x, w)$

(64) treats ‘want’ as quantifying over the “bouletically best” worlds in the modal base, given some way of resolving incomparabilities in the subject’s desires. (This contrasts with the necessity semantics in (63) which effectively treats ‘hope’ as quantifying over the minimal worlds in the modal base given every way of resolving incomparabilities in the subject’s desires.) Suppose $g_{want}(x, w)$ includes the proposition that x marries Alice (alice) and the proposition that x marries Sue (sue). Insofar as x cannot marry both Alice and Sue, the $\leq_{g_{want}(x, w)}$-minimal alice-worlds u and $\leq_{g_{want}(x, w)}$-minimal sue-worlds v in the modal base are incomparable. Yet the first conjunct of (62b) is verified by the $\leq_{g_{want}(x, w)}$ chain including u, and the second conjunct is verified by the $\leq_{g_{want}(x, w)}$ chain with minimal worlds including v. “Bouletic dilemmas” can be coherently expressed with vouloir ‘want’. The contrast between (62a) and (62b) can be explained in terms of independently motivated differences in the truth-conditional contents of ‘hope’ and ‘want’.
4.2.4 Subjunctive-selection with emotive factives

Emotive factives are prima facie puzzling from the perspective of commitment-based approaches to mood selection: if emotive factives imply commitment to their complements, why do they select subjunctive (at least in French)? Whence the contrast between (65) with the emotive factive être heureux ‘be happy’, and (66) with the non-emotive factive savoir or desiderative espérer?

(65) Alice est heureux que Blanche soit végétarien.
   Alice is happy that Blanche is.SBJV vegetarian

(66) Alice sait/espère que Blanche est végétarien.
   Alice knows/hopes that Blanche is.IND vegetarian

We can derive subjunctive-selection with emotive factives from the combination of their factivity implication and the diversity condition on modal bases. The factivity of être heureux requires (perhaps among other things) that the subject believes the complement:

\[ \bigcap \text{DOX}\ x; w \subseteq p. \]

So, if the modal base was identified with the subject’s beliefs, \( p \) would be true throughout the modal base. This violates diversity given that ‘be happy’ takes an ordering source representing (certain of) the subject’s preferences. One isn’t happy about everything one believes to be the case. So, as with ‘want’, the modal base \( \bigcap f_{\text{happy}}(x, w) \) must include some \( \neg p \)-worlds. This violates the presupposition of \([+_{\text{ind}}]\): \( \bigcap f_{\text{happy}}(x, w) \subseteq \text{g}_{\text{happy}}(x, w) \) isn’t included in the representation of the subject’s state of mind, \( \bigcap \text{DOX}_{x, w} \subseteq \text{N}_{x, w} \), since \( \bigcap f_{\text{happy}}(x, w) \not\subseteq \bigcap \text{DOX}_{x, w} \). Subjunctive-selection with emotive factives follows from the analysis of mood selection from §4.1 and independent features of their semantics. Far from being puzzling, subjunctive-selection is positively predicted on our account.

4.2.5 Indicative-selection with promettre vs. subjunctive-selection with ordonner

So far we have been focusing on attitude verbs, narrowly construed. Let’s turn to applying the account from §4.1 to commissives like promettre ‘promise’, which select indicative, and directives like ordonner ‘order’, which select subjunctive.

\footnote{We can leave open the lexical semantics of how exactly the modal bases of emotive factives are identified. Following \textsc{v. Pintel\ 1999}, a plausible constraint is that \( \bigcap f_U(x, w) \) properly include \( \bigcap \text{DOX}_{x, w} \). (Note that such a constraint won’t help P/R’s account. The subject is prepared to defend all the propositions in \( f_U(x, w) \) as reasonable, and is thus committed to the modal background. That she may be prepared to defend additional propositions (i.e., propositions in \( \text{DOX}_{x, w} - f_U(x, w) \)) is irrelevant given P/R’s definition of commitment to a modal background.)}
Directives and commissives are speech-act verbs: they report (and in special cases perform) directive and commissive speech acts. So it is natural to identify the local context introduced by these verbs in terms of the contextual parameters in the reported discourse, i.e. $c_{loc} = (CS_l, \subseteq CP_l)$. Unlike the attitude verbs discussed in the previous sections, directives and commissives can take both a subject and an object. I suggest that the verb’s modal backgrounds are associated with the individual argument that gets controlled when the complement is an infinitive. With commissives such as *promettre* ‘promise’ this is the subject argument, and with directives such as *ordonner* ‘order’ this is the object argument, as reflected in (67)–(68).

(67)  
(a) Mary$_i$ promised Bill$_i$ PRO$_i$ to bring dessert.  
(b) Mary$_i$ promised PRO$_i$ to bring dessert.

(68)  
(a) Mary ordered Bill$_j$ PRO$_j$ to bring dessert.  
(b) Bill$_j$ was ordered PRO$_j$ to bring dessert.

Accordingly, the modal backgrounds associated with *promettre* represent the subject’s individual presuppositions, and the modal backgrounds associated with *ordonner* represent the object’s individual presuppositions.¹⁹ We can use these points to capture the contrasting mood-selection properties of *promettre* and *ordonner*.

Start with subjunctive-selection with *ordonner*. Directive utterances, such as those with imperatives, update the body of norms or priorities accepted for purposes of conversation; they update the set of acts which the addressee (object) is contextually committed to performing (§§3.2, 4.1). Since directive verbs report directive speech acts, the ordering source $g_{order}(y, w)$ represents these contextual commitments of the addressee/object $y$. Given diversity, the modal base $\cap f_{order}(y, w)$ must include some $\neg p$-worlds (for complement $p$). This is supported by examples such as (69)–(70): directive utterances enjoining $p$ are infelicitous if the addressee’s individual presuppositions already entail $p$, e.g. in (69)–(70) where the addressee already satisfies or is committed to satisfying $p$.

(69)  
[Context: Addressee is sitting down.]  
#Sit down!

(70)  
Mary: I will bring dessert to the party later.  
Bill: Yes, Mary, I order you to.  
Mary: I know, I just said I will! Sheesh.

¹⁹See [Hamblin 1971, Gunlogson 2001, Parkas & Bruce 2010, Ginzburg 2012], a.o., on the importance of including public individual commitments in representations of discourse.
Yet, as noted in §3.2, directive utterances are anomalous when coupled with denials that they will be satisfied, as reflected in (71).

\[(71)\]

\[a. \quad \text{Leave! — #even though you won't.}\]
\[b. \quad \text{I order you to leave! — #even though you won't.}\]

Though obligations can go unfulfilled, discourse participants appear to assume otherwise for purposes of conversation when accepting directive utterances. So, whereas the modal base $\bigcap f_{\text{order}}(y, w)$ includes $\neg p$-worlds, the context set of the reported discourse $CS_i$ does not. So, $\bigcap f_{\text{order}}(y, w) \not\subseteq CS_i$, and the presupposition of $[+_\text{ind}]$ is violated — hence subjunctive-selection with ordonner.

What distinguishes commissives and directives in matters relevant for mood selection is the modal base and its relation to the complement. Like with the directives in (71), making a promise is anomalous when coupled with an assertion or assumption that it won’t be satisfied:

\[(72)\] I promise to bring dessert — #even though I won’t.
\[(73)\] [Context: It is mutually presupposed that there is no way Mary will be able to come to the party later. Mary says:]
#I promise to come to the party later.

However, whereas issuing a directive that $p$ is infelicitous if the addressee is already publicly committed to $p$, as in [69]–[70], making a promise can be felicitous even if the future act has already been predicated of the promisor:

\[(74)\] I will bring dessert to the party later. I promise.
\[(75)\] Sue (to Bill): I will bring drinks to the party later. Mary will bring dessert. Mary: Yes, I promise.

These examples suggest that in cases of promise-making the speaker’s individual presuppositions and the discourse common ground entail the complement. Additional evidence for this comes from presupposition satisfaction: the presupposition of Bill’s use of ‘too’ in (76) — that someone else will bring something to the party — is satisfied simply in virtue of Mary’s having promised to bring dessert.

\[(76)\] Mary: I promise to bring dessert to the party later.
Bill: Good. Sue will bring something too.

Again, of course promises can go unfulfilled. What is important here is that dis-
course participants appear to assume for purposes of conversation that they won’t.

The above examples suggest that both \( f_{\text{prom}}(x, w) \) (the modal base representing the subject’s individual presuppositions) and \( CS_i \) (the local context set of the reported discourse) come to entail \( p \). Our motivation for denying that the modal base is included in the context set of the reported discourse doesn’t apply with commissives. So, the presupposition of \([+_\text{ind}]\) is satisfied, and \textit{promettre} selects indicative.

Two clarificatory remarks: First, one might worry that treating the modal base of \textit{promettre} as entailing the complement predicts a violation of the diversity condition. However, the above examples provide evidence that, perhaps contrary to initial appearances, \textit{promettre} doesn’t in fact take an ordering source. The subject’s commitment to the act in question is represented in the modal base: the priority is treated as a fact, at least for purposes of conversation.

Second, treating the modal base and local context for \textit{promettre} as entailing the complement is compatible with Searle’s “preparatory” condition that “it is not obvious to both [speaker] S and [hearer] H that S will do A in the normal course of events” (Searle 1969: 63). In promising \( p \) one accepts for purposes of conversation that \( p \), and that \( p \) will come to be mutually presupposed after the production of one’s utterance (cf. Stalnaker 2002). These attitudes are compatible with thinking that one might not ultimately perform the promised act A, thinking that the addressee thinks that one might not do A, or thinking that the addressee doesn’t accept prior to one’s utterance that one will do A. The relevant attitude toward the complement isn’t belief but acceptance for the purposes of conversation.

4.3 Selection and grammaticalization

The account developed in this section follows P/R and others in the literature in providing a semantic analysis of mood. The proposed analysis treats mood marking in terms of a relation between the semantics of mood features and modal predicates in context, rather than simply in terms of the semantics of the predicate (as in, e.g., Parkas 1992, Giannakidou 1999). Distinguishing the semantics of mood features and embedding predicates in this way can help capture cases of mood choice — i.e., predicates which can optionally take indicative or subjunctive — without positing distinct lexical entries. However, it raises a potential worry about explanatoriness in cases of selection. For instance, in §4 we saw that P/R treat predicates such as \textit{vouloir} and \textit{ordonner} as lexically associated with subjunctive in order to explain why these predicates must take subjunctive even in contexts where the contextual commitment presupposition associated with \([+_\text{ind}]\) is satisfied. In light of parallel examples with indicative-selecting predicates — examples where indicative is required even though
the presupposition of $[+_\text{ind}]$ isn’t satisfied — I suggested that P/R might revise their account by positing grammaticalized licensing of indicative as well. The worry is that grammaticalizing mood selection more generally in this way weakens the explanatoriness of an account based on contextual commitment.

The account in §4.2 avoids this concern. The mood-selection properties of croire, vouloir, espérer, fiction verbs, commissives, and directives are derived from independent features of the semantics — the nature of the predicate’s modal backgrounds, the nature of the local context introduced by the predicate, and the predicate’s specific truth-conditional and presupposed content — and general principles of interpretation (e.g., Maximize Presupposition!, diversity). We can capture the mood-selection properties of these predicates without positing lexical association with mood-licensing features. This isn’t to say that there is no grammaticalization in matters of mood selection, whether in French or in other languages. But, other things equal, we should prefer an account that derives mood-selection properties without needing to stipulate them in the lexical semantics.

5 Literature comparisons

We began in §1 with an informal general characterization of accounts of mood selection which give a notion of commitment a fundamental explanatory role. Though these accounts all invoke some notion of commitment, they differ in their formalizations and conceptual underpinnings. Such differences lead to differences in predictions and explanatory power. Now that the proposed alternative account from §4 is on the table, it may be helpful in situating it in the literature to examine certain of these broadly commitment-based accounts more explicitly. I leave more detailed comparisons and discussion of other types of accounts for future research.

For dialectical purposes we have focused primarily on P/R’s commitment-based account of mood selection in French (§§2–3). The relevant notion of commitment in P/R’s account is commitment to the content of a modal background: Indicative mood, according to P/R, presupposes “contextual commitment” in the sense of presupposing (roughly) that every individual argument of the predicate is disposed to defend the propositions in the predicate’s modal backgrounds as reasonable in any relevant conversation. §2 raised empirical and theoretical challenges for this way of understanding contextual commitment. Indicative marking needn’t be associated with a commitment to defend the content of the predicate’s modal backgrounds across contexts. On the account developed in §4, by contrast, indicative-selecting predicates “presuppose commitment” in the sense of presupposing that the predicate’s
modal backgrounds are entailed by the modal backgrounds representing the event described by the predicate — i.e., entailed by the representation of the subject’s overall state of mind, in the case of attitude predicates narrowly construed, or entailed by the representation of the reported discourse, in the case of speech-act predicates. This account provides a more explanatory treatment of the puzzle cases from §§1–3.

A prominent approach is to treat mood marking in terms of *epistemic commitment about the complement*. To a first approximation, indicative-selecting predicates are treated as implying that the speaker/subject takes the complement to be true (e.g., [Noonan 1985, Palmer 1986, Farkas 1992, Giannakidou 1999, Marques 2009, Siegel 2009]), or bears some suitably strong epistemic attitude toward the complement (e.g., Smirnova 2011). Persistent challenges for these accounts include subjunctive-selection with emotive factives (though see [Siegel 2009]), indicative-selection with fiction verbs and commissives, and indicative-selection with ‘hope’.

Take, for instance, Giannakidou’s appeal to *veridicality*. While a notion of “veridicality” might initially seem to be associated with notions of realis or truth, it ends up amounting essentially to entailment: indicative-selecting predicates are treated as those which entail the truth of their complement in “some epistemic model.” The challenge is to provide an independent account of what demarcates the class of epistemic models: What unifies — conceptually or semantically — sets of worlds representing what someone says, believes, knows, or dreams, and what distinguishes them from sets of worlds representing what someone desires or orders? Why does entailment by sets of worlds in the former class count as “veridical,” whereas entailment by sets of worlds in the latter class does not? Why would fiction verbs, which typically don’t describe reality and whose complements typically aren’t regarded as true by the subject, be systematically conceptualized as “veridical,” whereas directive verbs, which report utterances that are incompatible with denials of their complements, be systematically conceptualized as “non-veridical”?

Understanding indicative-selection in terms of states of mind captures the intuition motivating epistemic-commitment accounts and provides a more explanatory account of what unifies the class of indicative-selecting predicates. Bearing a certain epistemic attitude toward the complement is neither necessary nor sufficient for indicative-selection. What is important is rather that the attitude state determined by the predicate’s semantics be included in the overall state of mind representing the event described by the predicate. This view carves out a role for normative commitments in mood selection (like on P/R’s account, though in a different way). And it allows for indicative-selecting predicates that lack doxastic commitment to the complement (e.g., espérer), and subjunctive-selecting predicates that imply doxastic commitment (e.g., emotive factives).
Schlenker’s (2005) account of mood selection in French bears important similarities to the account developed in §4. On Schlenker’s account, indicative mood presupposes that the evaluation world is in the “context set” of a relevant thought event or speech event. The account in §4 follows Schlenker in giving a generalized notion of context a fundamentally explanatory role. However, first, on Schlenker’s account the grammar leaves open what event determines the context set relevant for satisfying the indicative presupposition. It might be the event described by the embedding predicate (in which case the relevant context set is the verb’s modal base) or the event described by the utterance itself (in which case the relevant context set is the discourse context set). This fails to explain why mood selection in French seems always to be determined by the attitudes of the subject rather than the speaker — e.g., why vouloir, directives, etc. cannot select indicative even if the speaker is publicly committed to the complement. Second, Schlenker treats mood selection as sensitive to a context set, which is conceptualized as a body of background information for an assertive act. The account in §4, by contrast, treats mood-selection as sensitive to relevant contextual information and priorities (norms, values, preferences, etc.). Mood selection is analyzed in terms of a general notion of (local) context, which is given a systematic interpretation in terms of overall states of mind.

In §2 we noted that P/R present their account as a foil to what they call the “proto-standard” analysis of mood. Accounts in this tradition demarcate subjunctive-selecting predicates as those which take a non-trivial ordering source. As P/R argue, indicative-selecting desideratives such as ‘hope’ and commissives pose challenges for these accounts. Though the account in §4 doesn’t explain mood selection fundamentally in terms of having a comparative semantics, our appeal to a general diversity condition on modal bases suggests that ordering sources may nevertheless have an indirect effect on mood selection. The diversity condition requires that any non-empty ordering source non-trivially distinguish among worlds in the modal base with respect to the embedded proposition \( p \). If a predicate \( P \) takes a non-empty ordering source, there must be \( p \)-worlds and \( \neg p \)-worlds in the modal base. So, given the proposed account of mood marking, if \( P \) selects indicative, the subject’s beliefs or individual presuppositions (depending on the predicate) must leave open whether \( p \). Conversely, if the subject’s beliefs or individual presuppositions entail \( p \), \( P \) must select subjunctive. This captures indicative-selection with desideratives such as espérer ‘hope’ and subjunctive-selection with emotive factives, respectively. However, the account does exclude the possibility (in French) of an indicative-selecting predicate that both takes a non-empty ordering source and determines a local context that entails the complement. This was what led us in §4.2.5 to treat promettre as taking an empty ordering source, and to represent the priorities in the modal base.
Though this move seems to be supported by the data in the case of ‘promise’, it may be less natural with other predicates associated with priorities.

6 Conclusion

This paper has developed an account of mood selection with attitude predicates in French. The guiding idea is to analyze mood in terms of a relation between a predicate’s semantics and a relevant overall state of mind: Indicative mood carries a presupposition that the modal backgrounds figuring in the predicate’s semantics are entailed by the modal backgrounds representing the event described by the predicate — formally, that the preordered set \((\bigcap P(x, w), \preceq_{P(x, w)})\) determined by the predicate’s semantics is included in the preordered set \((CS; \preceq_I)\) representing the local context set up by the predicate (e.g., the subject’s doxastic-normative state of mind, in the case of attitude predicates narrowly construed, or the presuppositions in the reported discourse, in the case of speech-act predicates). Drawing on an independently motivated notion of local context, I argued that this account captures various puzzling cases of mood selection. These cases include indicative-selection with \(croire\) and fiction verbs, subjunctive-selection with emotive factives (in contrast to non-emotive factives), indicative-selection with \(espérer\) versus subjunctive-selection with \(vouloir\), and indicative-selection with \(promettre\) versus subjunctive-selection with \(ordonner\). The mood-selection properties of these predicates can be derived from independently motivated features of their semantics and general principles of interpretation. The proposed account captures intuitions motivating certain previous approaches to mood selection, while improving in empirical coverage and explanatory power.

Our discussion has of course been limited. I only considered a single language: French. And I focused only on mood marking in the complements of attitude predicates — in particular on cases of mood selection, or predicates which require a particular mood in the complement clause. It is worth investigating how the proposed account may be applied more generally — e.g., to mood selection in root clauses, and mood switching under negation and in questions; to cases of mood choice, and interpretive differences in examples with predicates that optionally take either indicative or subjunctive; and to mood selection and choice in other Romance and non-Romance languages. For instance, though I have argued that mood selection in French is sensitive to the local context set up by the embedding predicate, other languages might allow the presupposition of the indicative-licensing feature to be satisfied in either the local or global context, or require the presupposition to be sat-
ished in the global context. It would be interesting to examine to what extent cross-linguistic differences in mood selection may be understood in terms of this kind of parametric variation. The broader prospects for the specific account of mood in this paper remain to be seen. Yet I hope our discussion has illustrated the fruitfulness of the general framework — the proposed semantic approach to mood and treatment of (local) context in terms of states of mind — for theorizing about issues of mood and modality.

References


BITTNER, MARIA. 2011. Time and modality without tenses or modals. In MONIKA RATHERT & RENATE MUSAN (Eds.), Tense across languages, pp. 147–188. Tübingen: Niemeyer.


CLOSE, JOANNE & BAS AARTS. 2010. Current change in the modal system of English: A case study of must, have to and have got to. In URSULA LENKER, JUDITH HUBER, & ROBERT MAILHAMMER (Eds.), The history of English verbal and nominal constructions, pp. 165–181. Amsterdam: John Benjamins.


