Modal Inconstancy: How Our Interests Influence How Things Could Be

Dissertation

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Abstract

Many sentences of modal discourse are inconstant: ‘Paris Hilton could have been a politician’, for example, seems to be true in some contexts, false in others. In this dissertation, I explore this topic, which we can call the inconstancy of de re modal attributions. My ultimate goal is to develop, motivate, and defend a new account of inconstancy and consider how it affects our understanding of certain issues in metaphysics and metametaphysics.

Extant accounts, such as David Lewis’s counterpart theory, locate inconstancy in the gap between a sentence and the proposition it expresses, so that the sentence ‘Paris Hilton could have been a politician’ expresses different propositions in different contexts, in much the way that the sentence ‘I am not a crook’ expresses different propositions in different contexts. Accounts like these are instances of what I call the shallow view of inconstancy. I instead locate the inconstancy in the gap between propositions and the world: the sentence expresses the same proposition in all contexts, but that proposition is true in some circumstances, false in others. I call this view the deep view of inconstancy.

The deep view, I claim, is preferable to the shallow view. In making my case for this claim, I advance three main lines of argument. First, I argue that, on most common formulations, the shallow view runs into semantic and metaphysical problems not faced by the deep view. If one wants to adopt the shallow view, I argue that there is one specific version that ought to be adopted. Second, I argue that the deep view comes with
conceptual advantages over any version of the shallow view: competence with certain fragments of natural language seems to be conceptually prior to competence with others, and the deep view best makes sense of this. Third, I argue that relevant linguistic data favor the deep view over the shallow view. While none of these lines of argument, taken in isolation, is enough to settle the matter, when we consider all three together we find a compelling cumulative case for accepting the deep view over the best version of the shallow view.

If the deep view is correct, then as these sentences change truth-value from one circumstance to the next, something about the circumstance must change alongside them. I argue that what changes are our conversational goals and interests. In making sense of the mechanics of this, I give an account of how such goals and interests can play a role in determining which objects could or must instantiate which properties (or stand in which relations). On this account, our goals and interests can help shape an object’s modal profile. Such a claim has far-reaching implications: if our goals and interests influence modal profiles, then those same goals and interests become relevant to certain debates in contemporary metaphysics and metametaphysics. The friend of the deep view thus has the resources to say new and interesting things in these debates; I focus in particular on a new strategy the deep view offers us when it comes to the familiar problem of the statue and the clay. Additionally, I spend some time sketching out and discussing a preliminary metametaphysical picture we can avail ourselves of upon accepting the deep view.
Dedication

To my nephew, Finn Wesley Kauffman;

and my better half, Satch Poddington.
Acknowledgments

I owe a lot of thanks to a lot of people.

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1.1. Introduction

Jim and Pam are having a conversation about the 2008 United States Presidential election. They are not concerned at all with certain aspects of the election—hurdles presented by poorly chosen running mates, the economic crisis, the state of morale throughout the country, the bad taste left in the mouths of many after the prior Presidency, etc.—but are instead focused particularly on the political achievements and personal history of the candidates. Jim says to Pam

(S1)  McCain could have won the election.¹

Pam agrees, and, given the conversation, her reaction seems appropriate.

Michael and Dwight are having a conversation about the 2008 United States Presidential election. They are not at all concerned with the political achievements or personal history of the candidates, but are instead focused on other aspects of the election—hurdles presented by poorly chosen running mates, the economic crisis, the state of morale throughout the country, the bad taste left in the mouths of many after the prior Presidency, etc. Michael says to Dwight

(S2)  McCain couldn’t have won the election.

Dwight agrees, and, given the conversation, his reaction seems appropriate.

What’s going on here? If we deem Pam’s acceptance of (S1) appropriate,

¹ Throughout, I name sentences with an ‘S’ followed by a numeral, flanked in parentheses. Later, when naming propositions, I follow a similar convention, though with a ‘P’ rather than an ‘S’.
wouldn’t we also deem appropriate her rejection of (S2), were she presented with an utterance of it? If we deem Dwight’s acceptance of (S2) appropriate, wouldn’t we also deem appropriate his rejection of (S1), were he presented with an utterance of it? In judging Pam and Dwight’s respective reactions to be appropriate, are we slipping into incoherence or contradiction? Should we conclude that one of them is in error, or could it be that both are somehow correct?

Of the many topics discussed in David Lewis’s *On the Plurality of Worlds*, comparatively little attention has been paid to what Lewis called the *inconstancy of de re modal attributions* (henceforth, *DRMAs*)—that is, the phenomenon by which many sentences of modal discourse, such as (S1) and (S2), are taken to be true in some contexts and false in others. This is unfortunate, as Lewis’s discussion, though lucid and provocative, is incomplete; there is much more to be said about how to both characterize and account for this phenomenon.

In this dissertation, I aim to move the discussion forward. My overarching goal is to introduce and motivate a new account of the inconstancy of DRMAs. Extant accounts locate such inconstancy in the gap between a sentence and the proposition it expresses, so that DRMAs such as (S1) express different propositions in different contexts, in much the same way that the sentence ‘I am not a crook’ expresses different propositions in different contexts. Accounts like these are instances of what I call the *shallow view*. My account

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2 I say more about what these are in Section 1.2.

3 For Lewis’s discussion, see Lewis 1986, pp. 284-263. The first discussion directly pertaining to how his views relate to the inconstancy of *de re* modal attributions can be found in Lewis 1971. For a startling illustration of how little attention the phenomenon of inconstancy has been given, see Bricker 2006, a survey of Lewis’s most influential work, which confines an explicit discussion of inconstancy to a mere three sentences (two of which are questions!).

4 I take the task of *characterizing* to be the task of describing what the phenomenon *is*, and the task of *accounting for* to be the task of describing *how it works*. I do not take these tasks to be wholly separable; engaging in either will involve engaging in a bit of the other.
instead locates inconstancy in the gap between propositions and the world: the sentence expresses the same proposition in all contexts, but that proposition is true relative to some circumstances and false relative to others. I call this view the *deep view*.

The deep view, as advanced here, is a radical view. It tells us that the reason (S1), for example, changes truth value alongside our conversational interests is because whether or not McCain instantiates the property *could have won the election* depends upon those interests. If the instantiation of such modal properties depends upon our interests, then, given the extent to which modal properties are appealed to in metaphysics—and, for that matter, philosophy in general, as well as in science—^5^—the influence of interests turns out to be rather widespread. Perhaps not surprisingly, another of my goals in this dissertation is to ward off the inevitable incredulous stares.

My way of casting the debate between the shallow and deep views mirrors much discussion in the recent yet vast literature on context-sensitivity. To use John MacFarlane’s terminology, the shallow view is an *indexicalist* view whereas the deep view is a *nonindexically contextualist* or perhaps *relativistic* view.\(^6\) This (and related) terminology is becoming standard in debates about context-sensitivity, though I will make slight deviations where I think there is good reason to do so. These deviations will be pointed out as we go through and find ourselves ready to define terms.

What is the difference between inconstancy, as I am using the term, and context-sensitivity in general? After all, lots of sentences of lots of different kinds of discourses seem to be “inconstant” insofar as their truth values vary with context in some way or

\(^5\) See, for example, Isaacs 2000 for characterizations of fundamental particles in dispositional (and hence, modal) terms.

\(^6\) See MacFarlane 2009.
another. Consider contingent sentences, the truth values of which will vary depending on what things are like in the world in which they are uttered, or temporary sentences, the truth values of which will vary depending on what things are like at the time at which they are uttered. Perhaps it’s also the case that the truth value of some sentences of epistemic or aesthetic or moral discourse will vary depending on which standards we adopt when we utter or evaluate them, too. These phenomena—contingency, temporality, perhaps sensitivities to certain types of standards—could all be grouped together, and any instance in which any of them manifest themselves could be taken as an instance of inconstancy, broadly construed. In this sense, ‘inconstancy’ and ‘context-sensitivity’ are mere synonyms.

We could talk that way, but I won’t. Instead, I restrict ‘inconstancy’ to the narrower sense in which it names only the phenomenon gestured at in our opening story about Jim and Pam and Michael and Dwight. Just as we might think of contingency and temporality as specific types of context-sensitivity that infect contingent and temporary sentences, respectively, I will discuss inconstancy as a specific type of context-sensitivity that infects certain DRMAs. In the end, nothing hangs on this other than convenience of presentation—it’s nice to have a name for the specific phenomenon under discussion, and it is easier to type and read ‘inconstancy’ than it is to type and read ‘the inconstancy of DRMAs’ or ‘the specific type of context-sensitivity that infects certain DRMAs’.

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7 I prefer to speak of temporary, rather than tensed, sentences. I also prefer to speak of temporary rather than tensed propositions. The reason underlying this latter preference is that I find it very strange, perhaps a category mistake, to speak of tense as a feature of anything other than language. If so-called “tensed” propositions are those that can change truth value over time, the title ‘temporary proposition’ seems much more fitting. Since so-called “tensed” sentences express temporary propositions, I prefer, for reasons of symmetry, to just call them ‘temporary sentences’. This is merely a presentational issue; nothing philosophically substantial hangs on it.

8 Though not all of them. I say more on this in Section 1.4.
While on the topic of terminology, a quick note on the use of the terms ‘deep’ and ‘shallow’ is in order. In *Writing the Book of the World*, Ted Sider describes and motivates a framework in which we can divide questions into, on one axis, those that are *metaphysically deep* versus those that *metaphysically shallow*, and on another, those that are *conceptually deep* versus those that are *conceptually shallow.* Metaphysical depth and shallowness are cashed out in terms of joint-carvingness, and conceptual depth and shallowness are cashed out in terms of embeddedness in our conceptual schemes. I won’t go into what these notions amount to here; instead, I bring them up just to point out that the distinction that I want to draw between the deep and shallow views does not amount to saying that the former is metaphysically or conceptually deep while the latter is metaphysically or conceptually shallow. I take it to be uncontroversial that *de re* modality in general is conceptually deep, and I also take it that very little that I say in this discussion will hinge on whether it is metaphysically deep or shallow. As such, even if Sider’s controversial claim that modality is metaphysically shallow is correct, his discussion of metaphysical depth turns out to be orthogonal to our purposes.

In the remainder of this chapter, I elucidate the phenomenon of inconstancy and provide both a run-down of the relevant semantic machinery and a brief characterization of the debate to be had. This is all by way of set up for Chapters 2 and 3, which contain detailed discussions of the shallow and deep views, respectively, as well as arguments—sometimes metaphysical, sometimes semantic, sometimes conceptual—for and against each position. Additionally, I will spend the final sections of Chapter 3 detailing some of the work the deep view can do for us if we accept it, as well as a general metaphysical

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9 See Sider 2011.
picture that it allows us to avail ourselves of. In Chapter 4, I turn to a discussion of relevant linguistic data in an effort to adjudicate between the views and argue that the data ultimately tell in favor of the deep view. I thereby conclude that the shallow view should be rejected and the deep view should be accepted.

What is all of this worth? Why care about inconstancy, and why bother asking if the phenomenon is deep or shallow? There are probably many answers; I’ll focus on two. The first begins with a short, apparent digression on the subject of counterpart theory. One of counterpart theory’s main virtues is that it is flexible—it captures the apparently fluid and loose nature of *de re* modality.\(^\text{10}\) We can take advantage of this flexibility in many ways, solving—or at least being able to take certain positions about—several metaphysical puzzles, such as the familiar puzzle of the statue and the clay. But it must be emphasized that it is not counterpart theory itself that aids us in these debates. Instead, we owe our gratitude specifically to the aforementioned flexibility, and counterpart theory just happens to be one way of capturing it.\(^\text{11}\)

What does this have to do with inconstancy? Simple: the flexibility mentioned *just is* inconstancy. By and large, counterpart theory is as useful as it is because it is an account of inconstancy. One way to avail ourselves of the advantages of the flexibility that comes with counterpart theory—such as assistance in solving certain metaphysical puzzles—is by going ahead and adopting counterpart theory. But we have other options: we can also avail ourselves of the relevant virtues by adopting some account *other than* counterpart theory, as long as that account properly accounts for inconstancy. The deep

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\(^\text{10}\) The other main virtues involve solutions to problems surrounding Lewis’s ontology, mainly regarding his views on accidental intrinsics and the debate over haecceitism, but we will not be concerned with those here.

\(^\text{11}\) For more on this claim, see Chapter 2.
view, I claim, is the best of those other accounts.

Our second answer is simpler: the phenomenon of inconstancy is intrinsically interesting. Consider the fact that we take the same DRMA to be true in some contexts and false in others, and consider the fact that such behavior is not already explainable within traditional discussions of context-sensitivity. That’s a pair of interesting facts. Insofar as we are interested in our linguistic behavior and, specifically, our practice of engaging in modal discourse, we ought to be interested in inconstancy.

1.2. De Re Modal Attributions

It would do us good to start out by getting clear on DRMAs. The ‘A’, of course, is for attribution, and, at the very least, an attribution is a kind of sentence. Sentences, on my account, are types that are tokened by utterances, inscriptions, or thoughts interpreted in a language. Throughout this discussion, I use ‘sentence’ ambiguously between sentence types and sentence tokens, leaving it to context to clarify the intended reading. Additionally, I use ‘utterance’ broadly, to include, not only spoken utterances, but also inscriptions and thoughts.

Perhaps we will want to say that ‘attribution’ is ambiguous between a kind of sentence, on the one hand, and a type of speech act, on the other. After all, there is a sense in which attributions are things that we do. Positing such an ambiguity will do us neither harm nor good, though, as all we need to pay attention to for the purposes of this discussion is the reading of ‘attribution’ that refers to a type of sentence. If there is no such ambiguity, we get the reading of ‘attribution’ that we need, and likewise if there is one. In the latter case, we just stipulate that we’re talking about attributions qua
sentences, not *qua* speech acts.

Attributions are sentences, but not just any sentence will count as an attribution. Questions, for example, are not attributions—similarly with commands, exclamations, and the like. The key difference between questions, commands, exclamations, and the like, on the one hand, and attributions, on the other, is that the latter are *truth-evaluable sentences*, whereas the former are not. Put another way, we might say that attributions are sentences that express *assertable* contents. Much can be said and argued about when it comes to the nature and norms of assertion, but much of that will be orthogonal to our present discussion.\(^{12}\) All we need for now is that attributions, one and all, be truth-evaluable sentences.

Attributions are truth-evaluable sentences, but not just any truth-evaluable sentence will count as an attribution—though many of them will. We can sort out the attributions from the non-attributions by taking the former to be the sentences that speakers\(^{13}\) use to attribute properties to objects, or to say of some objects that they stand in some relation. On this criterion, the following truth-evaluable sentences qualify as attributions:

\[
\begin{align*}
(S3) & \quad \text{Obama is hungry.} \\
(S4) & \quad \text{Obama is taller than Biden.}
\end{align*}
\]

whereas the following does not:

\[
(S5) \quad \text{If Obama is taller than Biden, then Biden is shorter than Obama.}
\]

---

\(^{12}\) Though, for those who prefer a more conservative view of assertion (such as Timothy Williamson’s view that we should assert only that which we know (see Williamson 2000, p. 243)), we might want to allow there to be attributions that express contents that are the objects of conjectures, conveyances, guesses, etc. Nothing in what I say here demands that we go one way rather than the other on this.

\(^{13}\) Or inscribers, or thinkers. In a fashion similar to my use of ‘utterance’, I use ‘speaker’ as shorthand for ‘speaker, inscriber, or thinker’.
(S3) is used to say of an object—in this case, a person, namely Obama—that it instantiates some property (is hungry). (S4) is used to say of some object—again, Obama—that it stands in some relation (is taller than) to some other object—Biden. By contrast, (S5), though constructed out of attributions, merely tells us about the truth-functional relationship between those attributions. By our current characterization, then, (S3) and (S4) are attributions, whereas (S5) is not.14

Perhaps this characterization of attributions is not really informative, as it simply tells us that the mark of a truth-evaluable sentence’s counting as an attribution is that the sentence is used to attribute some property or relation to some object or objects.15 By way of remedying this, we might instead characterize attributions as follows:

For any truth-evaluable sentence \( s \), \( s \) is an attribution just in case either (i) there is an object \( o \) and a property \( F \) such that \( s \) expresses a proposition according to which \( o \) instantiates \( F \), (ii) there are objects \( o_1, \ldots, o_n, \ldots \) and a relation \( R \) such that \( s \) expresses a proposition according to which \( o_1, \ldots, o_n, \ldots \) stand in \( R \), (iii) there are some \( x \)s and a property \( F \) such that \( s \) expresses a proposition according to which the \( x \)s collectively or distributively instantiate \( F \), or (iv) there are some \( x_1 \)s, \ldots, \( x_n \)s, \ldots and a relation \( R \) such that \( s \) expresses a proposition according to which the \( x_1 \)s, \ldots, the \( x_n \)s, \ldots stand in \( R \).

The second ellipses in each disjunct are included in order to allow for attributions to an infinite number of objects, such as

(S6) 1, 2, 3, \ldots are all less than \( \aleph_0 \).

Disjuncts (iii) and (iv) are included to allow us to make attributions to pluralities, such as

14 Stewart Shapiro has pointed out that, if one adopts the view that we can generate predicates by existentially generalizing sentences, and that those predicates have as their content properties, then there is readings of (S5) such that it does come out as an attribution, for example

(S5*) Barack Obama is an \( x \) such that, if \( x \) is taller than Joe Biden, then Joe Biden is shorter than \( x \).

If we adopt such a view, then all truth-evaluable sentences that involve a subject and a predicate will count as attributions. This, however, would pose no special problem.

15 To attribute a relation to some objects is just to say of those objects that they stand in that relation.
(S7) The Cheerios are tasty.

(S8) The Lucky Charms are tastier than the Cheerios.

This characterization of attributions is, for a few reasons, not exactly perfect. For starters, there are cases in which a truth-evaluable sentence seems to be an attribution despite the fact that either \( o \) or \( F \) (or \( o_1, \ldots, o_n \), \( F \) or \( x \) or \( x_1 \), \( x_2 \), \( x_n \), \( R \) or the \( x_1x_2 \), \( x_3x_4 \), \( x_nx_n \)) does not exist, such as in

(S9) The round square is round.

(S10) \( \Delta \) is such that it is the set of all sets.

There are also cases that involve generics, such as

(S11) Tigers have four legs.

that involve no specific object or objects. It wouldn’t do to take ‘Tigers’ to refer to a plurality, either. After all, if ‘Tigers’ refers to \( \text{the tigers} \), then (S11) is true if and only if \( \text{the tigers} \) each have four legs.¹⁶ On such a view, the existence of just one three-legged tiger would make (S11) false, which is a good reason to reject the view.

These problems are tough. Their roots are not in our characterization of attributions, however, but in problems having to do with non-referring terms and generic quantification and the like. While these problems certainly \( \text{are} \) problems, they aren’t problems unique to this topic. Recognizing this allows us to treat these issues as bugs to be fixed later on—though, to be clear, I do not intend to engage with or fix these bugs anywhere in this dissertation. The admittedly imperfect characterization of attributions introduced above will be adequate for the task at hand.

With this working characterization of attributions, we can now move on to the

¹⁶ Assuming that (S11) is to be read distributively. It is easy to see that it would be false when read collectively!
somewhat trickier task of characterizing our real subject matter: DRMAs. Our
characterization will be similar to before:

For any truth-evaluable sentence $s$, $s$ is a DRMA just in case either (i*) there is an object $o$ and a property $F$ such that $s$ expresses a proposition according to which $o$ could (or must, etc.) instantiate $F$, (ii*) there are objects $o_1$, …, $o_n$, … and a relation $R$ such that $s$ expresses a proposition according to which $o_1$, …, $o_n$, … could (or must, etc.) stand in $R$, (iii*) there are some $x$s and a property $F$ such that $s$ expresses a proposition according to which the $x$s could (or must, etc.) collectively or distributively instantiate $F$, or (iv*) there are some $x_1$s, …, $x_n$s, … and a relation $R$ such that $s$ expresses a proposition according to which the $x_1$s, …, the $x_n$s, could (or must, etc.) stand in $R$.

As before, this characterization face problems with sentences such as

(S12) The round square could be round.

but these problems will again be everyone’s problems, and hence, not problems I intend to address further here.

Upon adopting this characterization, we are faced with a question. Given what has been said so far, the DRMA

(S13) Obama could be hungry.

might, depending on your favored account, express any of the following propositions:

(P1) Possibly, Obama is hungry.

(P2) Obama is possibly-hungry.

(P2) Possible-(Obama) is hungry.

(P4) Obama is-possibly hungry.

And, of course, this list is probably not exhaustive.\footnote{Parallel issues arise in the philosophy of time with respect to debates over persistence. See Haslanger 2003 for an extensive tour through the relevant terrain here.} So, when we say that a DRMA is a truth-evaluable sentence that expresses a certain sort of proposition, is that sort of
proposition akin to one of (P1) through (P4)? If so, which? If not, what kind of proposition is it?

The best answer to these questions is, I think, “it depends.” Much of the discussion to follow will involve looking at these various candidates and evaluating the accounts that offer them. Which sort of proposition we should take DRMAs to express will depend on two factors: first, what we take the best characterization of inconstancy to be, and second, which metaphysical and semantic positions we are willing to adopt when accounting for it. But since we have not discussed the phenomenon in any real detail yet, we ought not get ahead of ourselves. The details of what sort of proposition is expressed by sentences like (S13) are a matter for a later time, to be settled while debating over which account of inconstancy should ultimately be adopted.¹⁹ For now, all we need say is that DRMAs are truth-evaluable sentences that satisfy any of (i*)-(iv*). Nothing in the remainder of this chapter will require any more specific characterization.

1.3. A Further Look at Inconstancy

Now that we have enough of an understanding of DRMAs, we can shift our focus to another important task: getting a more precise characterization of inconstancy. When we attend to discourse about how objects could or must be, we often encounter cases in which the very same attribution is taken to be true in some contexts and false in others. Consider, for example,

(S14) Dwight could receive a promotion.

In some contexts, we would be inclined to assent to (S14); after all, all else aside, Dwight

¹⁹ These issues are addressed in Chapters 2-4.
Schrute III, a salesperson, has a great professional record and has never missed a day of work, and we all know that Corporate smiles upon such traits. In others, we would take (S14) to be false; after all, all else aside, Dwight is a bumbling sycophant with very limited interpersonal skills, and we all know that Corporate frowns upon such traits. On the face of it, the truth value we assign to (S14) will vary depending on which of Dwight’s properties we happen to be more interested in and which we are willing to push to the sidelines while making our assessment. For now, I intend this to be nothing more than an observation about how speakers tend to treat certain sentences in different situations.

Here’s another, more controversial example. Consider

(S15) Dwight Schrute III is essentially the son of Dwight Schrute, Jr.

In some—probably most—contexts, we would be inclined to assent to (S15). After all, all else aside, Dwight is a human being, and common wisdom\textsuperscript{20} tells us that human beings have their genetic origins essentially. In others, we would take (S15) to be false. After all, in some contexts, perhaps those in which we are focused only on personhood to the exclusion of any consideration of human nature, we might be inclined to assent to something like

(S16) Dwight could have grown from a people seed.\textsuperscript{21}

(S15) and (S16) seem inconsistent, so in contexts in which we assent to (S15), we have to reject (S16), and vice versa. Again, it seems that the truth value we assign to (S15) will change depending on which properties we happen to be more interested in and which we

\textsuperscript{20} Along with Kripke 1980.

\textsuperscript{21} We at least sometimes entertain such sentences as true, such as when they play into the antecedents of conditionals. Consider, for example, the sentence ‘If Dwight could have grown from a people seed, he could have failed to have human parents.’. For more on people seeds, see Thomson 1971.
are willing to ignore while making our assessment. It just so happens that situations in which we are willing to focus only on personhood, to the exclusion of any consideration of human nature, are few and far between.

I think that this is all very close to what David Lewis was after when he wrote

I think there is a great range of cases in which there is no determinate right answer to questions about representation de re, and therefore no right answer to questions about modality or counterfactuals de re. Could Hubert Humphrey have been an angel? A human born to different parents? A human born to different parents in ancient Egypt? A robot? A clever donkey that talks? An ordinary donkey? A poached egg? Given some contextual guidance, these questions should have sensible answers.\(^{22}\)

and

Attend to the variety of what we say about modality and counterfactuals de re, and I think you will find abundant evidence that we do not have settled answers, fixed once and for all, about what is true concerning a certain individual according to a certain (genuine or ersatz) world. The way of representing is not at all constant. Different answers are often right in different contexts, … It can very well happen that no answer is determinately right, for lack of the contextual guidance that normally does the determining.\(^{23}\)

These passages suggest that, by Lewis’s lights, DRMAs such as

(S17) Humphrey could have been an angel.

(S18) Humphrey could have been born to different parents.

(S19) Humphrey could have been born to different parents in ancient Egypt.

and so on are all such that we would take them to be true in some contexts and false in others. If we pay attention to our assessments of such fragments of modal discourse, we notice that those assessments, in some intuitive sense, “vary with context.” In fact, without some degree of “contextual guidance,” it looks like we would have no way to

\(^{22}\) Lewis 1986, p. 251.

\(^{23}\) Ibid., p. 252.
determine whether Humphrey could have been an angel, or a talking donkey, or a poached egg, or what have you. As this “contextual guidance” points out us in different directions, our answers to such questions might very well change. The phenomenon by which we, as competent speakers, assess DRMAs in such an inconstant manner is the phenomenon that I, following Lewis, am calling inconstancy.

It has been well established that the truth values of sentences containing modal expressions can sometimes shift alongside changes in so-called relative modalities. A given sentence might be taken to be true if we concern ourselves only with metaphysical modality (i.e. possibility and necessity with respect to the laws of metaphysics) yet false if we constrain ourselves to considerations of nomological modality (i.e. possibility and necessity with respect to the actual laws of nature). Such shifts are prevalent in our everyday modal discourse, as illustrated by the following bits of conversation offered by Angelika Kratzer:

A: “The ancestors of the Maoris must have arrived from Tahiti.”

B: “No, they could have arrived from somewhere else. We know that their technical means permitted them much longer trips. They could have even arrived from Peru.”

A: “But we know that they did not arrive from Peru. We know it from their tribal history. We know it from Polynesian mythology. We simply know it. They must have arrived from Tahiti.”

In this exchange, A and B shift back and forth between epistemic modality (i.e. what is possible and necessary with respect to what we take ourselves to know) and technological modality (i.e. what is possible and necessary with respect to available

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24 Whatever those might be!
25 Kratzer 1977, pp. 338-339. See also the example involving Professor Schielrecht on pp. 342-343.
technology). Consider also

C: “Rakaipaka must be our chief.”

D: “No, he must not. The Queen does not like him particularly. She does not dislike him particularly, either. He could be our chief, but there are others who could be just as well.”

C: “I do not care whether the Queen likes Rakaipaka. I only care about our tribe. I only consider what is good for our tribe. That is why Rakaipaka must be our chief.”

In this exchange, C and D switch back and forth between *Queenish-preferential modality* (i.e. what is possible and necessary with respect to the Queen’s preferences) and *tribal-prudential modality* (i.e. what is possible and necessary with respect to what is prudential for the tribe). Should we take inconstancy to be just the shifting of relative modalities?

No, as we can find cases of inconstancy *within* relative modalities. Consider the cases offered earlier by Lewis. Even if we focus on just metaphysical modality, (S17)-(S19) will still be inconstant. And even if we consider our earlier cases involving Dwight receiving a promotion or McCain being such that he could have won the election, if we simply stipulate that the modal auxiliary verbs in the corresponding DRMAs are to be read as metaphysical, or nomological, or historical, those DRMAs will still be inconstant, as well. Inconstancy, then, should not be taken to be just the shifting of relative modalities, as it can manifest itself even if we hold relative modalities fixed. In fact, to foreshadow a bit, one advantage of the characterization of inconstancy that I offer here is that it gives a uniform treatment of inconstancy that arises both (i) within relative modalities and (ii) as a result of shifting relative modalities. Rather than treating the

26 The best way to read this instance of ‘He must not’, in keeping with the spirit of Kratzer’s example, is not as a literal ‘He must not’, but instead as ‘It is not the case that he must’.

27 As can be seen, sometimes these relative modalities can get quite fine-grained.
variation in truth-value that results from the shifting of relative modalities as a phenomenon separate from inconstancy, the characterization on offer here allows us to simply subsume the former under the latter.

Summing up so far, inconstancy is a phenomenon by which the truth values of DRMAs can “vary with context,” in some intuitive sense, where that “variation with context” is not merely a shift in relative modality. Like contingency, temporality, and perhaps sensitivities to certain types of standards, inconstancy is thereby a kind of context-sensitivity.

1.4 Constancy?

With a better understanding of inconstancy under our belts, we are now able to ask: are all DRMAs inconstant, or is it just some of them that are, or perhaps none of them? Let’s address the last option—none of them—first. Accepting that answer amounts to accepting a view that we might call total constancy. On this view, no DRMA really changes truth value, except for in manners that are already well understood, such as in the case of, say, those DRMAs that are also temporary sentences. If this were the case, the need for much of the discussion to come would simply drop out.

I reject total constancy. Among the more controversial aspects of the view is that it implies that a very large number of DRMAs come out false. If, in one context we utter a DRMA and take it to be true, and in another we utter its negation and take that sentence to be true, we can be correct in exactly one of those contexts. When two agents with different interests diverge in their assessments of any DRMAs (such as those already discussed in this chapter), even if they both seem to be offering proper assessments, one
of them is correct and one of them is incorrect. End of story. If this is right, then a good bit of what we typically take to be true isn’t. This view is thereby a form of error theory about DRMAs—not one in which we are always systematically in error, but one in which we are often in error and have very little way of establishing when we are and when we are not.

Methodologically, when giving a semantics for a certain bit of discourse, I would prefer to adopt a view that makes true, and accounts for the truth of, as many of the sentences speakers in that discourse take to be true as possible. We ought not content ourselves with a view that attributes mass error until we have found plausible alternative views to be deficient. As such, due to its rejection of our target phenomenon and its reliance on an appeal to mass error, I’d like to push total constancy to the side. This is not to rule it out \textit{a priori}—perhaps, in the end, we’ll see that the best way to go is to accept total constancy—but until then, it would be fruitful to investigate some more hopeful options.

So how many of the DRMAs are inconstant? Our rejection of total constancy leaves us with only the other two potential answers: all of them or just some of them. Of those, we should go with the latter. Just as only some sentences are contingent and only some are temporary, only some DRMAs are inconstant. The phenomenon we are interested in, then, is perhaps more properly called the \textit{inconstancy of some of the DRMAs}.

Unfortunately, I can offer no test that might help us discriminate between the constant and inconstant DRMAs in general. Neither can I offer any test that will tell us whether a given DRMA \textit{is} inconstant. I can, however, offer a few tests that will help us
tell whether a given DRMA isn’t inconstant—that is, whether it is constant.\textsuperscript{28} To be clear, I do not take these test to be decisive, nor do I take the list of tests to be exhaustive. Even if, for a given DRMA, these tests fail to show that DRMA is constant, we should not conclude that it is thereby inconstant. It might very well be constant for reasons that the tests do not test for. But for now, this is at least a start.

1.4.1. The Absurdity Test
Suppose that we have a DRMA the predicate of which denotes a property or relation that is such that, if any object instantiates that property or if any objects stood in that relation, we would find ourselves with a contradiction.\textsuperscript{29} Any such DRMAs, says the Absurdity Test, are constant.

Here are some examples. Consider

(S20) Obama could have won and lost the election.

(S21) Obama could be married and not married.

(S22) Obama could be taller and not taller than Joe Biden.

These DRMAs are all constant; if any object instantiated \textit{won and lost the election} or \textit{is married and not married}, or if any objects stood in \textit{is taller and not taller than}, we would find ourselves with a contradiction. (S20)-(S22) are false, and constantly false. The DRMAs that are their negations, such as

(S23) Obama couldn’t have won and lost the election.

are true, and constantly true.

\textsuperscript{28} These tests are based on the material found in deRossett ms., pp. 10-16.

\textsuperscript{29} I call this test the \textit{Absurdity Test} rather than the \textit{Contradiction Test} to distinguish it from what I am calling the \textit{Contradiction Test} in later chapters.
Now consider the converse. Suppose that we have a DRMA that is such that (i) its predicate denotes a property or relation that is such that, if the object or objects denoted by the subject terms did \textit{not} instantiate it, we would find ourselves with a contradiction, and (ii) according to that attribution, the property or relation denoted by the predicate \textit{could not} be instantiated by the object or objects denoted by the subject or subjects. Any such attributions, says the Absurdity Test, are constant.

Here are some examples. Consider

(S24) Obama could be neither married nor not married.
(S25) Obama could be neither President nor not President.
(S26) Obama could be not identical to Obama.

These sentences are all constant; if any object failed to instantiate \textit{is either married or not married} or \textit{is either President or not President}, or any object failed to stand in the \textit{is identical to} relation with itself, we would find ourselves with a contradiction.\textsuperscript{30} (S24)-(S26) are false, and constantly false. The DRMAs that are their negations, such as

(S27) Obama couldn’t be neither married nor not married.

are true, and constantly true. As we can see, DRMAs that are constant according to the Absurdity Test are ones that we would rarely find ourselves uttering.

\textit{1.4.2. The Actuality Test}

Consider a DRMA the subject term (or terms) and predicate of which are such that the predicate denotes a property or relation that the subject (or subjects) actually instantiate. Any such attribution, says the Actuality Test, is constant.

\textsuperscript{30} We get the contradiction from (S26) only if we assume $\forall x \ (x=x)$. I have no qualms with this assumption.
Here are some examples. Consider

(S28) Obama could have been President in 2011.
(S29) Obama could have been married in 2011.
(S30) Obama could have been born in the United States.

These sentences are all constant, since Obama actually instantiates *was President in 2011*, *was married in 2011*, and *was born in the United States*. (S28)-(S30) are true, and constantly true. The DRMAs that are their negations, such as

(S31) Obama couldn’t be President in 2011.

are false, and constantly false. As with the Absurdity Test, most of the DRMAs that are constant according to the Actuality Test are ones that we would rarely find ourselves uttering.

1.4.3. The Essence Test

Consider a DRMA the subject term (or terms) and predicate of which are such that the predicate denotes a property or relation that is not co-instantiable\(^{31}\) with any of the essential properties or relations instantiated by the object (or objects) denoted by the subject term (or terms). Any such attribution, says the Essence Test, is constant.

Here are some examples. Consider

(S32) Obama could be a twin prime number.\(^{32}\)
(S33) Obama could be divisible by two.

are both constant, since *is a twin prime number* is not co-instantiable with Obama’s

\(^{31}\) Say that some properties are *co-instantiable* just in case there is at least one circumstance and at least one object such that that object is in the extension of all of those properties relative to that circumstance.

\(^{32}\) This example is taken from deRossett ms., p. 13.
essential properties, nor is standing in the *is divisible by* relation with any number.\textsuperscript{33} (S32) and (S33) are false, and constantly false. The DRMAs that are their negations, namely

(S34) Obama couldn’t be a twin prime number.

(S35) Obama couldn’t be divisible by two.

are true, and constantly true. And once again, DRMAs that are constant according to the Essence Test are ones we would rarely find ourselves uttering.

Of course, running the Essence Test will require that we get at least somewhat clear on what essences are and which objects have which essential properties and stand in which relations essentially. I’ll suggest in Chapter 3, however, that our answers to such questions about essences and essential properties might be informed by our account of inconstancy. As such, until we get a bit further into the discussion, the Absurdity and Actuality Tests will be much more reliable than the Essence Test. If we are to make use of the Essence Test, we must do so only tentatively, as it might be the case that the claims that we want to make about an object’s essence and essential properties will need to be revised in light of what we’ll have to say about inconstancy in the meantime.

\section*{1.5. A Semantic Framework}

So far, so good. But if we are to continue, we’ll need a semantic framework within which to operate. For the purposes of this discussion, I am working within a more or less Kaplanian framework;\textsuperscript{34} in this section, I lay this framework out in detail.

\textsuperscript{33} Though if some form of structuralism about mathematical entities is true, they might be after all.

\textsuperscript{34} See Kaplan 1989a and 1989b. I say “more or less Kaplanian semantic framework” rather than “Kaplanian semantic framework,” because Kaplan himself would probably want to distance himself from some of the central claims I make here. MacFarlane (ms) reports that, in personal correspondence, Kaplan has said that (in MacFarlane’s words) “he is willing to consider times and locations as aspects of circumstances, [but] he would himself draw the line at tastes and standards, on the grounds that these are too subjective and ‘perspectival’ to be ‘features of what we intuitively think of as possible
1.5.1. Utterances and Expressions

I take as basic and intuitive the notion of an utterance (inscription, thought). Expressions are utterances interpreted in a language. A paradigmatic kind of expression is that of a sentence, but subject terms such as names and descriptions also count as expressions, as do predicates. Any expression that is not itself a complete sentence but a part of a sentence is a subsentential expression; ‘dog’, ‘the dog’, ‘the dog that ran’, and ‘when the dog that ran’ are just some examples of subsentential expressions. Sentences themselves can also be subsentential expressions, which can be illustrated by looking at compound sentences; ‘The dog ran’ is a complete sentence but is also a component of the complete compound sentence ‘The dog ran and the bunny hopped’, making ‘The dog ran’ a subsentential expression as well.

1.5.2. Contexts of Utterance

Expressions are uttered in a context of utterance. Instead of thinking of the context of a given expression’s utterance as something like the situation, broadly construed, in which that expression is uttered,35 we can think of contexts as ordered n-tuples of values of various parameters that represent various corresponding aspects of such situations.36

35 This is the notion adopted in Lewis 1981.
36 Lewis says “A context is a location—time, place, and possible world—where a sentence is said.” (1981, p. 79, emphasis in original). Similarly, Nathan Salmon says “I am thinking here of a context as the setting or environment in which an utterance occurs” (2002, p. 532, fn. 37). This way of thinking about contexts is to be contrasted with Kaplan’s way of thinking about contexts as “package[s] of whatever parameters are needed to determine the referent, and thus the content, of the directly referential expressions of the language” (1989b, p. 591). Ben Caplan calls the former notion of context the natural notion (2003, pp. 196-197) and the latter notion the formal notion (ibid., pp. 197-198), and argues (ibid., pp. 198-202) that, due to the inability of the natural notion to account for the existence of improper contexts, i.e. contexts in which either the agent or the addressee isn’t located at the time and location of the context, we should instead adopt the formal notion (see also Predelli 1998). I am inclined to agree.
Despite thinking of contexts in this way, I will still talk of speakers uttering sentences in contexts: a speaker $a$ utters a sentence $s$ in a context $c$ just in case $a$ utters $s$ in a situation that is represented by the ordered $n$-tuple $c$.

More needs to be said about the parameters of contexts, but it would be fruitful to first introduce a few more related notions.

1.5.3. Content and Character

Intuitively, contents are an aspect of what we might think of as meaning: what it is that a given expression expresses relative to a context. Even though expression is relativized to contexts, many expressions will have fixed content, which is to say that they express the same content in all contexts. Some expressions, however, will have variable content, where an expression $e$ has variable content iff there are at least two contexts such that $e$ expresses different contents in those contexts. Since expressions express contents relative to contexts, we can think of contexts also as functions from expressions to contents.

Aside from content, another feature of an expression that we might think of as an aspect of meaning is its character. Intuitively, the character of an expression $e$ is a rule that tells us how to identify $e$’s content in a context. Put simply, the character of an expression determines a function from contexts to contents. The character of ‘I’, for example, takes as input a context and produces a content as output—in this case, an agent. In general, the character of an expression will be determined by the characters of the component expressions that make it up and how they’re put together. To discern which content is expressed by any given expression in any given context, then, we first

\[\text{with Caplan on this point, and, as such, will proceed with the formal notion of context in mind.}\]
look to the character of that expression and then look to the values of the contextual parameters to which the expression is indexical (if any) to “fill in the holes,” as it were.

1.5.4. Kinds of Content

One important kind of content is what we can call a proposition. Propositions are the contents of sentences, i.e. “what is said” by a sentence relative to a context. I take propositions to be the primary bearers of truth, which is to say that, while for any sentence $s$, any proposition $p$, and any context $c$, if $s$ expresses $p$ in $c$, then $s$ is true in $c$ if $p$ is true, the right-hand side of that biconditional is explanatorily prior to the left-hand side. In this sense, sentences inherit their truth values from the propositions they express in contexts. I also take propositions to be (i) the bearers of modal properties, such as being necessary and being contingent; (ii) the objects of the so-called “propositional” attitudes such as belief, knowledge, doubt, hope, and so on; (iii) the objects of assertion, conjecture, conveyance, guessing, and so on; and (iv) the referents of ‘that’-clauses.

When I talk about propositions, I do not mean to talk about unstructured propositions, i.e. propositions taken as sets of possible worlds. Instead, I mean to talk about structured propositions, i.e. propositions that have as constituents the contents of the subsentential expressions that make up the sentences that express them, bound together in a way that to some extent resembles the structure of those sentences.

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37 Cf. Kaplan 1989a, p. 500. Lewis 1981 points to a potential problem here, arguing that if contents—i.e. “what is said” by a sentences in contexts—are propositions, those contents will not be compositional in the way that they are supposed to be (p. 95). Entering this debate would take us too far afield, so with this potential problem noted, I set it to the aside. For further discussion, see Stanley 2002, p. 324 and Stojanovic 2007, pp. 55-56.

38 This will get more complicated later. See Section 1.5.10.

39 See fn. 13.


41 See Kaplan 1989a, pp. 494-495.
make this make a little more sense, we introduce a few more kinds of contents. The content of a singular term, such as a name, is an *object*, and the content of a predicate is a *property*. I take it that the notion of *object* is already pretty clear: you and I, this dissertation, the number 4, a neutrino, the set of all neutrinos, etc., are all objects. *Properties* are the characteristics, traits, features, etc., that objects instantiate.

My adoption of structured propositions is coupled with an assumption of a theory of *direct reference*, which for our purposes can be understood as the view that some expressions—the *directly referential* ones—are such that their “referent, once determined … is taken as *being* the propositional component.”42 Together, we get the view that the proposition

(P5)  Obama is hungry.

has as constituents Obama—the very person himself!—as well as the property *being hungry*, and that these constituents are related in such a way that that proposition is true just in case the person instantiates the property.

These views are all controversial. Some refuse to countenance propositions in the first place,43 and even among those who accept them are those who reject direct reference altogether44 or prefer an account of unstructured propositions.45 Nevertheless, these are my assumptions. We all need a framework within which to start, and it would be well beyond the scope of this discussion to try to defend my framework of choice or to give a characterization and account of inconstancy general enough to be amenable to any and all

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45 Such as those cited in fn. 40.
semantic frameworks. By adopting the assumptions that I do, I find myself able to make many useful distinctions in a clear and simple manner. Furthermore, I suspect—though have admittedly not yet verified—that at least the central elements of what I do in what follows will be translatable into other semantic frameworks.46

1.5.5. Contextual Parameters

With these issues of content addressed, we can return to the discussion of the various parameters of contexts, which we can call contextual parameters. Such parameters correspond to those aspects of the context that, when a speaker utters an expression in that context, play a role in fixing the content of that expression in that context. Accordingly, there are agent, world, time, and location parameters, and perhaps others.47 These parameters range over (i.e. take as their values) entities of kinds appropriate for the type of parameter in question. The agent parameter, for instance, ranges over agents, and the agent parameter of each specific context takes as its value a particular agent.48 The same goes for the world parameter and worlds, the time parameter and times, and so on. For a given utterance of an expression e, then, the relevant context of utterance is (at least) the ordered n-tuple <a, w, t, l>, where a is the agent that uttered s, and w, t, and l are the world, time, and location, respectively, at which a utters e.49

46 See Lewis 1986, pp. 57-59, for a discussion of how to get structured propositions within his framework, for example. This is crucial, given the amount of overlap that this discussion will have with Lewis’s work.
47 Other parameters that have been proposed include, inter alia, addressee, demonstratum, epistemic standards, aesthetic standards, gustatory standards, and standards of precision.
48 Whether or not there can be multiple agents in a context is a matter I will not discuss here.
49 There are subtleties here regarding true utterances of sentences such as ‘I am not here’ now, as recorded on, say, an answering machine. For details on how to make sense of such sentences, see Predelli 1998.
1.5.6. Extensions

In addition to contents and characters and contexts, we’re also interested in extensions. Expressions and contents both have extensions, and different kinds of expressions and contents have different kinds of extensions. The content of a sentence is a proposition; the extension of both that proposition and the sentence that expresses it is a truth value. The content of a predicate is a property; the extension of both that property and the predicate that expresses it is the set of objects that instantiate that property. The content and extension of a singular term is the object that the term refers to.

1.5.7. Context-Sensitivity I: Indexicality

We are now in a position to introduce a notion that will be of central importance throughout the rest of the discussion: the notion of context-sensitivity. Say that an expression e is context-sensitive just in case the extension of e at a context depends in part on the value of at least one of that context’s parameters.\(^{50}\)

There are two ways in which an expression might be context-sensitive. We’ll introduce the first now, and the second in Section 1.5.9.

First, the extension of an expression might depend on features of the context insofar as the content of the expression depends on features of the context, such as in

(S36) I am sitting.

The content of the subsentential expression ‘I’ is the value of the agent parameter of the context, which we can call the agent of the context, or, alternatively, the operative agent. Since ‘I’ is indexical in this way and the agent it denotes\(^{51}\) will herself be a constituent of

\(^{50}\) Cf. MacFarlane 2009.

\(^{51}\) I use ‘denote’ synonymously with ‘express’, alternating between the two when it feels less awkward to
the proposition expressed by (S36) in a given context, the indexicality of the subsentential expression infects the rest of the sentence, resulting in (S36) itself being indexical.

Contexts have multiple parameters and, as we can see from the above example, the content of an expression often depends on the value of just one parameter or the values of just a few particular parameters of the context of utterance, rather than all of them. To draw more fine-grained distinctions, we can introduce varieties of indexicality for each of the contextual parameters. In general, if the content of an expression \( e \) depends on the \( \chi \)-parameter of the context, call \( e \chi \)-indexical. (S36), then, is agent-indexical, insofar as its content depends in part on the agent of the context. Likewise, a sentence such as

\[(S37) \quad \text{Wesley is sitting now.}\]

will be time-indexical, insofar as its content depends in part on the time of the context.

An expression can also be indexical in many of these more fine-grained senses, as can be seen by considering

\[(S38) \quad \text{I am actually here now.}\]

which is agent-, world-, location-, and time-indexical all at once. Conversely, an expression can be indexical in none of these ways, which can be seen by considering

\[(S39) \quad \text{Wesley is in University Hall at 3:26 PM on July 18th, 2012 in @.}\]

where ‘@’ names the actual world. No matter the agent, world, time, or location of the context, (S39) will always express the same proposition.\(^53\)

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\(^{52}\) Throughout the discussion, I specify exact times no more finely than to the minute, and ignore considerations of time zones and the like.

\(^{53}\) In making this claim, I am admittedly setting aside discussion of other, non-standard parameters, such as supposed epistemic standard, aesthetic standard, etc., parameters.
For any contextual parameter $\chi$ and expression $e$, if $e$ is not $\chi$-indexical, call $e\ \chi$-nonindexical. As such, (S39) is agent-, world-, time-, and location-nonindexical.

Indexicality is tightly connected to character, insofar as the character of an expression will tell us which varieties of indexicality are enjoyed by that expression. The character of ‘I’ tells us that it is agent-indexical; the character of ‘now’ tells us that it is time-indexical. The characters of expressions that are not indexical to any contextual parameters are fixed functions; the rules for determining the content of such an expression in a context dictate that such an expression expresses the same content, no matter the context.

1.5.8. Circumstances of Evaluation

Whereas contexts of utterance partially determine the contents of expressions, circumstances of evaluation partially determine the extensions of contents. Like contexts, circumstances are ordered $n$-tuples of the values of various parameters—circumstantial parameters—that play into the determination of the extension of contents. These parameters correspond to various aspects of the environment or situation, broadly construed, in which that content is evaluated, i.e. assigned an extension, or could be evaluated.

In the discussion of contexts, I was able to give a list of more or less paradigmatic contextual parameters; the list of appropriate circumstantial parameters, however, is highly contentious. Some take the list of parameters to be exhausted by just a world parameter, while others include times, standards, or other candidates. For now, I’ll remain
neutral on this issue, though it will be of the utmost importance later in this chapter and throughout this dissertation.

The extension of a content relative to a circumstance is determined by the values of the parameters of that circumstance.\textsuperscript{54} Suppose that circumstances are made up of just the values of a world parameter. The extension of a given property (and thereby the predicate that expresses it) at a given circumstance is partially determined by what things are like at that world. Changing the world of the circumstance might lead to changing the extension of certain properties (and the corresponding predicates). Thus, the extensions of those properties will be relativized to circumstances. Likewise, the extension of a proposition (and thereby the corresponding sentence) relative to a circumstance is determined by the way things are at that world. Changing the world of the circumstance might lead to changing the truth value of certain propositions (and the corresponding sentences). Thus, truth values of those propositions will be relativized to circumstances, too.

If we want to introduce times into our circumstances, we complicate our story slightly. The extension of a property (and the corresponding predicate) relative to a circumstance is determined by what things are like at the world and at the \textit{time} of the circumstance, and the truth value of a proposition (and the corresponding sentence) relative to a circumstance is determined by what things are like at that time at that world. Should we want to introduce even more parameters, we simply complicate our story in similar ways.

There are close connections between contexts of utterance and circumstances of

\textsuperscript{54} As well as what sort of content—proposition, object, property—that content is.
evaluation. Corresponding to each context of utterance $C$ will be a circumstance of evaluation $E$ that has as the values of its circumstantial parameters the same entities that serve as the values of the contextual parameters of $C$. Call such an $E$ the circumstance of $C$. In many cases, when we evaluate a content, we do so using the circumstance of the context in which the expression which expressed that content was uttered. For instance, suppose that our circumstances include time and world parameters and that I utter

(S36) I am sitting at $t$ in $w$. In such a context, (S36) expresses the proposition

(P6) Wesley is sitting.

In evaluating (P6), we use the circumstance of the context of its utterance. As such, we look at the circumstance $E$ that has as the values of its time and world parameters the same time and world that serve as the values of the time and world parameters of the context of utterance, and see if (P6) is true at that world at that time. Thus, (P6) is true relative to $E$ iff Wesley is sitting in $w$ at $t$.

A given circumstance $E$ is the circumstance of a given context $C$ iff it has as the values of its circumstantial parameters the same entities that serve as the values of the corresponding contextual parameters of $C$. For any circumstantial parameter, then, there must be a corresponding contextual parameter. Otherwise, $E$ would have as the value of one of its circumstantial parameters an entity that does not serve as the value of the corresponding contextual parameter of $C$, because there would be no corresponding contextual parameter of $C$. As such, there must be a contextual parameter for each circumstantial parameter we posit, even if that contextual parameter does no work. If it turns out that we need a richer notion of circumstance and find ourselves positing a
circumstantial parameter for, say, epistemic standards, we must also introduce a contextual epistemic standards parameter as well, even if there are no expressions that are epistemic standards-indexical. This will matter more later on.

With the notion of circumstance at our disposal, we are able to further elucidate the notion of content. Put simply, contents determine functions from circumstances to extensions. Proposition determine functions from circumstances to truth values, while properties determine functions from circumstances to sets of objects. Singular terms behave somewhat more strangely: they determine constant functions from circumstances to extension.

1.5.9. Context Sensitivity II: Circumstantiality

We now arrive at the second way in which an expression can be context-sensitive: the extension of its content in that context might depend on the values of some circumstantial parameters (which, as we have seen, depend on the values of contextual parameters). If a given content is such that its extension varies across circumstances, say that that content is circumstantial. For example, (P6) will be world-circumstantial insofar as its truth value depends on (at least) the world of the circumstance. An expression is said to be circumstantial in virtue of expressing circumstantial content; thus, (S36) is circumstantial, as well.

As before, there will be more fine-grained varieties of circumstantiality. If the extension of a given content depends on the $\psi$ parameter of the circumstance, call that content $\psi$-circumstantial. (P6), then, is world-circumstantial. Any expression with $\psi$-circumstantial content is also $\psi$-circumstantial; thus, (S36) is world-circumstantial.
For any circumstantial parameter $\psi$ and content $c$, if $c$ is not $\psi$-circumstantial, call $c$ $\psi$-noncircumstantial. Any expression with $\psi$-noncircumstantial content is also $\psi$-noncircumstantial.

1.5.10. Sentence Truth

With the notions of context and circumstance on the table, we are now in a position to see, not just what it is for a proposition such as (P6) to be true, but also what it is for a sentence such as (S36) to be true. Say that a sentence $s$ is true in a context $C$ just in case it expresses a proposition $p$ in $C$ that is true relative to the circumstance $E$ of $C$. So, (S36), as uttered in a context $C$ the operative agent of which is me, expresses (P6); if (P6) is true relative to the circumstance $E$ of $C$, then (S36) is true in $C$.

1.5.11. Operators

Matters get more complicated when we consider the fact that, while we will often evaluate a content relative to the circumstance of the context in which the expression that expressed that content was uttered, this will not always be the case. Sentential operators, such as ‘it is possible that’ and ‘it is necessary that’, perhaps ‘it was the case that’ and ‘it will be the case that’, etc., can be added to a sentence $s$, creating a more complex sentence $s^*$, to indicate that we should evaluate $s$ in some way other than by using the circumstance of the context of $s^*$’s utterance. These issues are too subtle to deal with in any sufficient detail here, so I’ll just settle for a few examples.

‘It is possible that’, when added to a sentence $s$, tells us that the whole sentence $s^*$
is true at a context \( C \) just in case the proposition expressed by \( s \) in \( C \) is true at either the circumstance \( E \) of \( C \) or at least one other circumstance that differs from \( E \) only with respect to world. ‘It is necessary that’, when added to sentence \( s \), tells us that the whole sentence \( s^* \) is true at a context \( C \) just in case the proposition expressed by \( s \) in \( C \) is true no matter what the value of the world parameter of the circumstance is.

If it does turn out to be an operator,\(^55\) ‘it was the case that’, when added to a sentence \( s \), tells us that the whole sentence \( s^* \) is true at a context \( C \) just in case the proposition expressed by \( s \) in \( C \) is true at some circumstance the time of which is earlier than the time of the circumstance of \( C \). Likewise, ‘it will be the case that’, when added to a sentence \( s \), tells us that the whole sentence \( s^* \) is true at a context \( C \) just in case the proposition expressed by \( s \) in \( C \) is true at some circumstance the time of which is later than the time of the circumstance of \( C \).

1.5.12. Summary

To sum up, then, the character of an expression determines a function from contexts to contents, and contents determine functions from circumstances to extensions. The character of a sentence is in general determined by the character of the subsentential expressions that make it up and how they’re put together, and determines a function from contexts to propositions. Those propositions determine functions from circumstances to truth values. When evaluating a sentence, which circumstance we look to—whether it be the circumstance of the context of that sentence’s utterance or some other circumstance—will be determined by aspects of the case, such as whether there are any sentential

\(^{55}\) For a summary of arguments that such expressions should be treated as quantifiers rather than operators, see King 2003.
operators present. If the proposition is true at the relevant circumstance (or any or all of the relevant circumstances), then the sentence that expresses it is true relative to the context of its utterance. Otherwise, that sentence is false relative to that context.

1.6. Contingency, Temporality, Inconstancy

We had characterized inconstancy as the phenomenon by which the truth value of DRMAs can “vary with context,” in some as-of-then unspecified, but nonetheless intuitive sense. Armed with the semantic machinery just discussed, we are now able to make this characterization much more precise.

Recall that to be context-sensitive, an expression’s extension must depend on features of context (or, by extension, circumstance). There are two common ways for a sentence to exemplify this feature. First, it might be that the sentence itself is indexical with respect to a contextual parameter $\chi$ and expresses (in contexts) $\chi$-noncircumstantial propositions. In this case, any variation in the sentences’s truth value is the result of the sentence expressing different propositions in different contexts that vary with respect to $\chi$, but with those propositions having the same truth values across circumstances. Second, it might be that the sentence itself is $\chi$-nonindexical but expresses (in contexts) $\chi$-circumstantial propositions. In this case, any variation in the sentence’s truth value is the result of the sentence expressing the same proposition in different contexts, but with that proposition having different truth values in different circumstances that differ with respect to $\chi$.$^{56}$

On standard accounts of contingency, we say that a sentence is contingent just in

$^{56}$ Though this has all been stated in terms of sentences and the propositions they express, the same points apply to expressions in general and the contents they express.
case it expresses a contingent, i.e. world-circumstantial, proposition. A sentence such as the previously discussed

(S3) Obama is hungry.

expresses in all contexts the contingent proposition

(P5) Obama is hungry.

This proposition can vary in truth value depending on the world of the circumstance. But we need not adopt these standard accounts and could instead opt for an account according to which a sentence is contingent just in case it expresses different noncontingent, i.e. world-noncircumstantial, propositions in different contexts that differ with respect to world, and some of those propositions differ in truth value. Put otherwise, a sentence is contingent just in case it is world-indexical yet expresses world-noncircumstantial propositions. On this sort of account, in a context the world of which is \(w\), (S3) expresses

(P7) Obama is hungry in \(w\).

while in a context the world of which is \(w^*\), it expresses

(P8) Obama is hungry in \(w^*\).

I will not here get into the merits of the standard account over this potential alternative or vice versa but will instead just point out that, no matter which way we go, contingency has something to do with either the contextual or the circumstantial world parameter. To remain neutral, we can characterize contingency disjunctively: a sentence \(s\) is contingent just in case (i) \(s\) is world-indexical and expresses different world-noncircumstantial (noncontingent) propositions in contexts that differ with respect to world, and some of those propositions differ in truth value, or (ii) \(s\) is world-nonindexical yet expresses a world-circumstantial (contingent) proposition, the truth value of which can vary across
circumstances that differ with respect to world.

There is a third disjunct that we could add to our characterization: (iii) \(s\) is world-indexical and expresses different world-circumstantial propositions in contexts that differ with respect to world. If we were to include (iii) as a disjunct in our characterization of contingency, we would be admitting sentences that can express different propositions in different contexts that differ with respect to world, with those propositions being such that they can have different truth values relative to different circumstances that differ with respect to world. I predict, however, that the fruit of such an admission would not be worth the labor. The inclusion of (iii) in our characterization of contingency is unmotivated and would also complicate the discussion far more than necessary. As I hope will be clear, sticking with just (i) and (ii) in our characterization will suffice for doing the work that needs to be done.\(^{57}\)

We could characterize contingency in a non-disjunctive way simply by saying that a sentence \(s\) is contingent iff there are contexts \(c\) and \(c^*\) such that \(s\) is true at \(c\) and false at \(c^*\), where \(c\) and \(c^*\) differ at least with respect to the value of their world parameters. With this noted, I will continue with the disjunctive characterization, for two reasons. First, the disjunctive characterization foregrounds the role played by propositions, whereas the non-disjunctive characterization does not. Second, the disjunctive characterization plays a certain dialectical role: by characterizing contingency disjunctively, we are able to set a precedent for making distinctions that will later prove fruitful in furthering debates about

\(^{57}\) As long as we're covering logical space, there are actually two more disjuncts we might consider including: (iv) \(s\) is world-context-insensitive yet expresses a unique world-noncircumstantial proposition, and (v) \(s\) is world-context-sensitive and expresses different propositions in different contexts that differ with respect to world, with some of those propositions being world-circumstantial and others being world-noncircumstantial. I reject the inclusion of (iv) since it is hard to see how any sentence that satisfies it could really count as contingent, and I reject the inclusion of (v) for the same reasons that I reject the inclusion of (iii).
inconstancy. This is not to say that I reject the non-disjunctive characterization of contingency; in fact, I think it’s correct. It’s just that there is more than one correct way to characterize contingency, and characterizing it disjunctively will better suit our purposes.

When it comes to the phenomenon of temporality, there are two major competing views.\(^{58}\) One view, called *eternalism*,\(^ {59}\) is that a sentence is temporary just in case it is time-indexical and expresses (in contexts) eternal, i.e. time-noncircumstantial, propositions, and some of those propositions differ in truth value. According to eternalism, a sentence such as (S3) is temporary because it expresses different propositions—some true, some false—in different contexts that vary with respect to time. In a context the time of which is 7:31 PM on April 30\(^{\text{th}}\), 2011, (S3) expresses the eternal proposition

(P9) Obama is hungry at 7:31 PM on April 30\(^{\text{th}}\), 2011.

and in a context the time of which is 12:00 AM on January 1\(^{\text{st}}\), 3999, (S3) instead expresses the eternal proposition

(P10) Obama is hungry at 12:00 AM on January 1\(^{\text{st}}\), 3999.

The other view, called *temporalism*, is that a sentence is temporary just in case it expresses (in contexts) temporary, i.e. time-circumstantial, propositions. According to temporalism, then, a sentence such as (S3) is temporary because it expresses in all contexts the temporary proposition

(P5) Obama is hungry.

which can vary in truth value depending on the time of the circumstance. As before, I will

\(^{58}\) For discussion, see Richard 1981, 1982. For a response to Richard, see Aronszajn 1996.

\(^{59}\) This is to be distinguished from the view in the metaphysics of time called *eternalism*, according to which all times exist and are on an ontological par.
not here get into the merits of eternalism over temporalism or *vice versa* but will instead just point out that, no matter which way we go, temporality has something to do with the time parameter. To again remain neutral, we can characterize temporality disjunctively: a sentence \( s \) is temporary just in case (i) \( s \) is time-indexical and expresses different time-noncircumstantial (eternal) propositions in contexts that differ with respect to time, and some of those propositions differ in truth value, or (ii) \( s \) is time-nonindexical yet expresses a time-circumstantial (temporary) proposition, the truth value of which can vary across circumstances that differ with respect to time.\(^{60}\)

As with contingency, we could characterize temporality in a non-disjunctive way, simply by saying that a sentence \( s \) is temporary iff there are contexts \( c \) and \( c^* \) such that \( s \) is true at \( c \) and false at \( c^* \), where \( c \) and \( c^* \) differ only with respect to the value of their time parameters. As before, with this noted, I will continue with the disjunctive characterization, for reasons exactly analogous to those given for preferring to talk in terms of the disjunctive characterization of contingency.

Modeling inconstancy after contingency and temporality will be fruitful, as all three are instances of the general phenomenon of context-sensitivity. Going along with the more formal characterizations of contingency and temporality laid out above, then, we might go on to characterize inconstancy in a similarly disjunctive fashion: a sentence \( s \) is inconstant just in case (i) \( s \) is \( \omega \)-indexical and can expresses different \( \omega \)-noncircumstantial (*constant*) propositions in contexts that differ with respect to \( \omega \), and some of those propositions differ in truth value, or (ii) \( s \) is \( \omega \)-nonindexical yet expresses a \( \omega \)-circumstantial (*inconstant*) proposition, the truth value of which can vary across

\(^{60}\) There are three other potential disjunctions that we might consider, analogous to (iii), (iv), and (v) from our discussion of contingency. I reject these for the same reasons that I rejected those.
circumstances that differ with respect to $\omega$. Though I take it to be correct, this characterization will unfortunately not be of real use to us until we specify more precisely what $\omega$ is.

Consider the following sentences:

(S40) At 10:30 AM, on July 23rd, 2015, Dwight could receive a promotion.\(^{61}\)

(S41) Dwight exists.

If our earlier

(S14) Dwight could receive a promotion.

was inconstant, (S40) should be, too.\(^{62}\) It doesn’t seem to be temporary, however, as its truth value will not vary over time, and it doesn’t seem to be contingent, as its truth value will not vary across worlds.\(^{63}\) (S41), on the other hand, is paradigmatically temporary and contingent, but not inconstant. For the most part, it takes little effort to notice the salient features of these sentences. (S40) *feels* inconstant, but not temporary or contingent; (S41) *feels* temporary and contingent, but not inconstant. Insofar as we are able to intuitively latch onto features that at least one but not both of these sentences have, it appears that we can, at least to some degree, discriminate among the three phenomena currently under consideration. This provides evidence for the claim that contingency, temporality, and inconstancy are distinct phenomena.

\(^{61}\) Disambiguated as

(S40*) At 10:30 AM, on July 23rd, 2015, it was the case that Dwight could receive a promotion.

rather than

(S40**) Dwight could have received a promotion, and he could have received it at 10:30 AM, on July 23rd, 2015.

\(^{62}\) Under the assumption that Dwight did not *actually* receive a promotion at that time. If he did, (S40) would be constant after all. More on that later.

\(^{63}\) De re modal attributions in general will not be contingent except under certain non-standard accessibility relations.
This evidence can help us in getting off the ground when it comes to determining more precisely what \( \omega \) is in our disjunctive characterization of inconstancy. Suppose that \( \omega \) is taken to be the world parameter. Then our characterization of inconstancy collapses into our characterization of contingency. This is bad, however, as we have already seen that some sentences, such as (S40), can be inconstant without being contingent, while others, such as (S41), can be contingent without being inconstant. Taking \( \omega \) to be the world parameter conflates phenomena—inconstancy and contingency—that should not be conflated.

Along exactly similar lines, suppose that \( \omega \) is taken to be the time parameter. Then our characterization of inconstancy collapses into our characterization of temporality. Again, this is bad, as we have already seen that some sentences, such as (S40), can be inconstant without being temporary, while others, such as (S41), can be temporary without being inconstant. Taking \( \omega \) to be the time parameter conflates phenomena—inconstancy and temporality—that should not be conflated.

This same style of argument can be run to show that \( \omega \) should not be taken to be the agent, location, standard of precision, or epistemic standard parameters, or, for that matter, any of the other standardly proposed non-standard parameters. As such, to properly characterize inconstancy, we’re going to have to help ourselves to a new parameter.

Before discussing the exact nature of this new parameter, however, it might be helpful to pause to reflect on exactly how much needs to be said to meet the minimum requirements for “spelling out” the nature of any parameter. We all accept agent, world, and time parameters, if not in our circumstances then at least in our contexts. We do not,
however, have anything resembling a consensus on what agents, worlds, or times are. We have various competing accounts of each, to be sure, but nothing resembling a consensus on the nature of any one of them. How much of a problem is this? Not much. We proceed by determining what sort of role these parameters play in semantics and then laying down constraints as to what type of entities would be most suited to serve as their values, given those roles. Worlds might be maximally consistent sets of propositions or fusions of maximally spatiotemporally interrelated pluralities of concrete objects, but no one would object to the continued use of the world parameter on account of the fact that we haven’t yet settled these metaphysical matters. We know that, if we want to understand the behavior of contingent propositions, the best way to do so is to make use of a circumstantial parameter, and the entities that serve as the values of this parameter should at least roughly fit with intuitions about what is different when we imagine the circumstances relative to which the relevant propositions are true as opposed to those relative to which they are false. Those intuitions then inform our judgments about which sort of entities can appropriately count as values of the parameter. What matters is, not that we have a perfect grasp of the nature of certain entities, but that the role played by the parameter for which they serve as values is itself a valuable one.

Maybe this attitude is overly permissive or even nonchalant, but it is not unprecedented. On the inclusion of potentially unclear notions in theories (specifically semantic theories), Robert Stalnaker says

> The success of the theory should depend not on whether the concepts can be defined, but on whether or not it provides the machinery to define

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64 In this sense, we aim at a depraved or applied, rather than a pure, semantics. See Plantinga 1976, 126-128.
linguistic acts that seem interesting and to make conceptual distinctions that seem important. With philosophical as well as scientific theories, one may explain one’s theoretical concepts, not by defining them, but by using them to account for the phenomena.66

The upshot is this: we don’t have to settle the exact nature of whatever entities \( \omega \) ranges over in order to introduce them into our account of inconstancy, just as we don’t have to settle the exact nature of worlds to introduce them into our accounts of contingency.

But, even with all that said, *something* is surely owed; perhaps not a discussion of *exact natures*, but something. It would be (probably a failed attempt at) theft over honest toil if we were to merely say “we need a new parameter, let’s call it the *such-and-such parameter*, and by the way, I don’t have to tell you anything about it, so let’s just move on.” The resulting take on the view would be deeply mysterious and unsatisfying. While we shouldn’t be required to tell a story about exactly what the entities that this new parameter ranges over *are*, and while we have already traced out the role that they play in accounts of inconstancy, we have not yet offered enough by way of intuitive constraints on the *sort* of entities they might be. If contingent propositions can change truth value as the world shifts, and temporary propositions can change truth value as time goes by, what is it, roughly but intuitively, that changes alongside the changes in truth value of inconstant propositions?

Here’s an admittedly loose attempt at a first pass at an answer that goes beyond what was gestured at previously. The shifts that inconstancy correlates with are shifts with respect to which properties and relations are relevant to our interests. By ‘interests’, I don’t mean what’s best for us, but rather something like our conversational direction

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and goals.\textsuperscript{67} Even holding world and time fixed, we can shift with respect to which information regarding property and relation instantiation we entertain, endorse, enforce, ignore, etc., and to what extent. Call the entities that encode such information \textit{schemes}. Since this new parameter ranges over schemes, call it the \textit{scheme parameter}.

Relative to some schemes, some properties or relations are taken to be instantiated (or not) essentially; relative to others, those same properties or relations are taken to be instantiated (or not) accidentally. The combination of properties and relations that an object instantiates (or not) essentially or essentially relative to a given scheme informs which DRMAs we take to be true of that object relative to that scheme. The truth value of certain DRMAs about Dwight, for example, might vary depending on whether, relative to the operative scheme, Dwight is taken to be essentially or accidentally human. Such would be the case when we evaluate the propositions expressed by our earlier

(S15) Dwight Schrute III is essentially the son of Dwight Schrute Jr.

(S16) Dwight could have come from a people seed.

Furthermore, it seems that, in some situations, we assign more weight to certain properties or relations than we do to others when assessing a given DRMA, sometimes even ignoring some among them. The truth values of certain DRMAs about Dwight, for example, might vary depending on whether, relative to the operative scheme, more weight is given to his professional record or to his very limited interpersonal skills.

Putting this all together, schemes are entities that (i) encode information pertaining to which properties or relations are instantiated (or not) by which objects accidentally or essentially, and (ii) assign weight to those properties and relations with

\textsuperscript{67} ‘Conversational’ should be taken broadly here, so as to include inner monologues and such. Thanks to Sigrún Svavarsdóttir for pointing out the need for this broader notion.
respect to which of them are more or less relevant to our interests. With that, I take it that enough has been said about schemes to at least get the ball rolling; further speculation into the nature of such entities, while perhaps metaphysically interesting, would take us beyond the scope of the current discussion.

To recap, say that a sentence $s$ is inconstant just in case (i) $s$ is scheme-indexical and expresses different scheme-noncircumstantial (constant) propositions in contexts that differ with respect to scheme, and some of those propositions differ in truth value, or (ii) $s$ is scheme-nonindexical yet expresses a scheme-circumstantial (inconstant) proposition, the truth value of which can vary across circumstances that differ with respect to scheme. The truth values of inconstant sentences vary alongside shifts in aspects of our interests. According to (i), which proposition is expressed by a given inconstant sentence can shift alongside shifts in our interests, and according to (ii), an inconstant sentence will always express the same proposition, but the truth value of that proposition can change alongside changes in our interests.

As before, there is a non-disjunctive characterization to be had. We could say that a sentence $s$ is inconstant iff there are contexts $c$ and $c^*$ such that $s$ is true at $c$ and false at $c^*$, where $c$ and $c^*$ differ only with respect to scheme. Just as with contingency and temporality, however, I will prefer to continue to talk in terms of the disjunctive characterization, for reasons exactly analogous to those offered before.

1.7. Objections to the Inclusion of New Parameters

There are reasons to be cautious when it comes to positing new parameters, be they

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68 In this way, schemes encode much of the same information that Lewis 1979 would put into the *conversational scoreboard*. 

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contextual or circumstantial. In this section, I discuss two of the more pervasive objections to positing new parameters in general.\(^{69}\)

**1.7.1. The Proliferation Objection**

Following MacFarlane, we can call the first objection the *proliferation objection*.\(^{70}\) The objection goes like this: if we accept a methodology according to which we adopt a new parameter each time we find a case in which a given class of expressions appears to be context-sensitive, thus generating the need for a new contextual (if the context-sensitivity is indexicality) or circumstantial (if the context-sensitivity is circumstantiality) parameter, we will quickly find ourselves swimming in new, non-standard parameters. Continuing to operate with such a methodology will lead to our semantics becoming overly complicated, so we ought to be conservative about which parameters we allow into our contexts and circumstances.

I certainly agree with the spirit of this worry, if not the letter itself. But, as MacFarlane says,

*Maybe you just need a lot of parameters to do semantics. This doesn’t make semantics intractable, unsystematic, or impossible (we have computers, after all). And there’s no reason why we can’t ignore most of these parameters when we are trying to illuminate the semantics of a particular class of expressions (say, epistemic words).*\(^{71}\)

As long as we can show that accepting a new parameter really does aid us in doing the semantics for a given class of expressions (and isn’t just some superficial convenience or, even worse, smoke and mirrors), we ought to accept the parameter. Why starve ourselves

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\(^{69}\) In Chapter 3, I also discuss some additional objections specific to positing new circumstantial parameters.

\(^{70}\) MacFarlane 2009, pp. 245-256.

\(^{71}\) MacFarlane 2009, p. 246.
of resources and try to do all of semantics with, say, our circumstances populated by just a world parameter, or, if we’re feeling slightly more liberal, both worlds and times? The friend of non-standard parameters will see such conservatism about parameters as akin to trying to do semantics with one hand tied behind your back.\textsuperscript{72}

I agree that we ought to be on the lookout for superfluous parameters. If we want to characterize and account for inconstancy without conflating it with other phenomena, my claim is that the scheme parameter is \textit{not at all} a superfluous parameter. So, despite charges of proliferation, it seems clear that, if adopting a scheme parameter really makes a difference\textsuperscript{73} when it comes to doing the semantics for DRMA\textsc{s}, then adopting it is not only the right way to go, but is also consistent with being vigilant against unnecessary proliferation.

1.7.2. The Indexicals Objection

Perhaps we ought to accept a contextual parameter in the semantics of a language only if there are expressions in that language that are indexical with respect to that parameter. So, if there are no $\chi$-indexical expressions in a language, then we ought to reject the inclusion of a contextual $\chi$ parameter in the semantics of that language. Furthermore, as discussed in Section 1.5.8, all circumstantial parameters will have an analogous

\textsuperscript{72} Of course, this objection might be taken more seriously if it can be shown that, upon adopting this liberal methodology, we end up adopting an \textit{unlimited} number of non-standard parameters. For more discussion on this point, see MacFarlane 2009, p. 246.

\textsuperscript{73} What counts as “making a difference”? Certainly, adopting a new parameter will “make a difference” if it allows us to give a semantics for a class of expressions for which we previously could not do so or leads to a simpler, more elegant semantics than any existing system. But adopting a new parameter might also “make a difference” if it leads to a semantics that is, first of all, not \textit{ac hoc} and does a sufficiently good job at giving a systematized account of complicated linguistic data and, also, gives us resources that might inform debates other than those directly regarding the semantics. Consider, for example, Lewis’s semantics for \textit{de re} modal attributions, counterpart theory, which, in addition to its semantic virtues, allows us to defend certain robust metaphysical claims such as monism with respect to material constitution (see Lewis 1971).
contextual parameter. If we can show that we have reason to reject some contextual parameter in the semantics for a language, then we also have reason to reject that purported parameter’s circumstantial analogue in the semantics for that language. So, if we ought to reject the inclusion of a contextual parameter $\chi$ in the semantics for a language, then we ought to reject the inclusion of a circumstantial parameter $\psi$ in the semantics of that language, if $\psi$ is the circumstantial analogue to $\chi$.

Insofar as it will be a largely empirical matter whether there are any such expressions in a language, then, given the Indexicals Objection, it will likewise be a largely empirical matter whether we are justified in including in our semantics any sort of scheme parameter.\footnote{Note that this point applies to \emph{any} parameter.} Suppose the language we are interested in giving a semantics for is English. Looking at English, we see the presence of first person pronouns, so we see the need for a contextual agent parameter. Looking at common indexical analyses of ‘now’ or ‘actually’, we see the need for contextual time and world parameters, respectively. But, or so the Indexicals Objection goes, we cannot use observations of this sort to justify the inclusion of a contextual scheme parameter in the semantics for English, since there seem to be no scheme-indexical expressions. So, given the reasoning above, if we have reason to reject the inclusion of a contextual scheme parameter in the semantics of English, we also have reason to reject the inclusion of a circumstantial scheme parameter in such a semantics. That leaves us with no scheme parameters.

In response to this objection, we could point out how easy it would be to introduce a scheme-indexical expression. The problem with such a move is that it would not really help at all toward our goal. We want to give a semantics for English-as-it-is
(i.e. English), not English-as-it-could-be-extended (i.e. not English). Instead, a better move would be to try to find, in English-as-it-is, scheme-indexical expressions. If this can be done, we have a response to the objection, and the contextual scheme parameter and its circumstantial analogue are in the clear. If it cannot be done, either we come up with something else convincing to say or the Indexicals Objection wins out.

As it turns out, I think that whether or not we have something to say will ultimately depend on which account of inconstancy we adopt, which is an issue that will be discussed heavily throughout the rest of this dissertation. As such, I’ll say no more about this objection here. Instead, I’ll return to it in Chapters 2 and 3, discussing how different accounts of inconstancy fare against it.

1.8. The Debate

At this point, we have an informative yet disjunctive characterization of inconstancy:

**INC:** A DRMA $a$ is *inconstant* just in case (i) $a$ is scheme-indexical and expresses different scheme-noncircumstantial (constant) propositions in contexts that differ with respect to scheme, and some of those propositions differ in truth value, or (ii) $a$ is scheme-nonindexical yet expresses a scheme-circumstantial proposition, the truth value of which can vary across circumstances that differ with respect to scheme.

Earlier, I also characterized contingency and temporality in a similarly disjunctive fashion. But I take it that we accept those characterizations as a result of accepting one of each of their disjunctions. Such is the heart of the debate between, in the case of temporality, temporalists and eternalists. It is not surprising that an analogous debate arises when it comes to discussions about inconstancy. Given our disjunctive characterization of inconstancy, we might adopt any of the following three positions.
First, we might adopt the shallow view, which amounts to embracing INC’s first disjunct: \( a \) is inconstant just in case \( a \) is scheme-indexical and expresses different scheme-noncircumstantial (constant) propositions in contexts that differ with respect to scheme, and some of those propositions differ in truth value. Inconstancy runs only sentence-deep, and getting clear on the phenomenon is merely a matter of getting clear on which constant propositions DRMAs express in which contexts.

Second, we might adopt the deep view, which amounts to embracing INC’s second disjunct: \( a \) is inconstant just in case it is scheme-nonindexical yet expresses a scheme-circumstantial (inconstant) proposition, the truth value of which can vary across circumstances that differ with respect to scheme. Inconstancy runs as deep as the level of content, and getting clear on the phenomenon goes beyond getting clear on which propositions DRMAs express in which contexts.

Third, we might adopt the mixed view, which amounts to accepting the disjunctive characterization just as it is. Some cases of inconstancy are shallow (i.e. satisfy the first disjunct), and some are deep (i.e. satisfy the second disjunct). In other words, some DRMAs are scheme-indexical yet express different scheme-noncircumstantial propositions in different contexts that differ with respect to scheme (with some of those propositions differing in truth value), while others are scheme-nonindexical yet express scheme-circumstantial propositions that can vary in truth value across circumstances that vary with respect to scheme.

While it is certainly an option, I will not consider mixed views in any detail until the very end of this discussion. Instead, I focus on arguments against the shallow view and in favor of the deep view, concluding that, if we have to accept one view or the other,
the deep view is the way to go. In Section 4.5 of Chapter 4, I return to the mixed view and argue that, given what will have been said by then, we will have also seen good reason to prefer the deep view to the mixed view.

That’s enough by way of set up. Let’s get started.
Chapter 2: Shallow Inconstancy

2.1. Introduction

Maybe getting clear on inconstancy is merely a matter of getting clear on which DRMAs express which constant propositions in which contexts. If so, the phenomenon is said to be shallow. This is the view held by friends of what I have been calling the shallow view. In this chapter, I flesh out some varieties of the shallow view along with some difficulties that they face.

Two preliminary notes are in order. First, I do not take myself to be offering an exhaustive list of all possible varieties of the shallow view. Instead, I focus primarily on varieties that are the most popular extant varieties or representative of the most plausible strategies. Even if not all of the logical space is covered—which would take a lot of pages—I take it that the really interesting and important bits are.

Second, while I go on to argue later that the shallow view should be rejected, I do believe that some varieties of the view are more plausible than others. As such, this chapter doubles as an attempt to motivate the claim that, if one wants to adopt the shallow view, some particular varieties are better candidates than others.

2.2. The Shallow View and Eternalism

In Chapter 1, I characterized inconstancy as follows:

**INC:** A DRMA $a$ is *inconstant* just in case (i) $a$ is scheme-indexical and

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1 See Chapter 4.
can expresses different scheme-noncircumstantial (constant) propositions in contexts that differ with respect to scheme, and some of those propositions differ in truth value, or (ii) \( a \) is scheme-nonindexical yet expresses a scheme-circumstantial proposition, the truth value of which can vary across circumstances that differ with respect to scheme.

INC is a disjunctive characterization, insofar as it tells us that a DRMA is inconstant just in case it meets at least one of the two criteria.\(^2\) This leaves us with three possibilities:

**Possibility 1:** All inconstant DRMAs are so in virtue of satisfying condition (i); or

**Possibility 2:** All inconstant DRMAs are so in virtue of satisfying condition (ii); or

**Possibility 3:** Some inconstant DRMAs are so in virtue of satisfying (i) and others are so in virtue of satisfying (ii), and all such DRMAs satisfy one condition or the other.

Possibility 3, according to which inconstancy is *mixed*, was addressed and subsequently put to the side in Section 1.8 of Chapter 1, leaving us with just Possibilities 1 and 2 for now.\(^3\) In this chapter, I explore Possibility 1, according to which inconstancy is *shallow*; in the next, I explore Possibility 2, according to which inconstancy is *deep*.

In accepting Possibility 1, friends of the shallow view endorse

**INC-S:** A DRMA \( a \) is inconstant just in case \( a \) is scheme-indexical and expresses different constant (scheme-noncircumstantial) propositions in contexts that differ with respect to scheme, and some of those propositions differ in truth value.

In doing so, they take inconstancy to be a mere by-product of our practice of sometimes using the same DRMAs to express different propositions in distinct contexts that differ at least with respect to scheme. As our operative scheme changes, so do the contents of some of our DRMAs. Sure enough, our interests partially determine which inconstant

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\(^2\) Again, there is an equally correct non-disjunctive characterization, but focusing on the disjunctive one will be more fruitful for our discussion. See Chapter 1, Section 1.8.

\(^3\) I return to consider the mixed view in Section 4.5 of Chapter 4.
sentences are true or false in a context, but the propositions those inconstant sentences express in contexts are assigned truth values independent of such matters. Equally independent of such matters is whether the facts that ground the truth of those propositions obtain. According to friends of the shallow view, we simply use inconstant language to express constant propositions that describe a constant reality made up of constant facts.

Thought of this way, the shallow view resembles the view of temporality held by eternalists. Eternalists adopt

**ET:** A sentence $s$ is temporary just in case $s$ is time-indexical and expresses different eternal (time-noncircumstantial) propositions in contexts that differ with respect to time, and some of those propositions differ in truth value.

In doing so, they take temporality to be a mere by-product of our practice of sometimes using the same sentences to express different propositions in distinct contexts that differ at least with respect to time. As times goes by, the contents of some of our sentences change. Sure enough, time partially determines which temporary sentences are true or false, but the propositions those temporary sentences express in contexts are true or false eternally, independent of any consideration of time. Equally independent of any such considerations is whether the facts that ground the truth of those propositions obtain or not. We simply use temporary language to express eternal propositions that describe an eternal reality made up of eternal facts.

INC-S and ET are very similar, so to see why someone might be drawn to INC-S, we can start by looking at what might draw someone toward ET. I focus here on two main motivations for ET. First, the notion of a temporary proposition is often taken to be
obscure, and it is commonly held that, if there are any such propositions, they are, in some noxious sense, *metaphysically weird*—and even worse if such things require the positing of temporary facts. If one of our goals while theorizing is to avoid mystery, obscurity, and noxious weirdness, and talk of temporary propositions opens the gates to such things, then, inasmuch as we can, we ought to avoid such talk. To do otherwise would be to needlessly obscure our subject matter.

Second, the linguistic data might tell in favor of ET. Eternalists will often claim that their view makes better sense of certain kinds of reports, such as intuitive judgments of the validity of certain arguments.\(^4\) Part of what the eternalist is doing with ET is attempting to give a semantics for temporary sentences, and a constraint on the adequacy of such a semantics would be that it respects actual judgments and actual use of language by competent speakers as much as possible.\(^5\) A semantics that failed to adequately capture such things would have a dim future indeed.

If we can avoid obscurity and better account for the linguistic data by adopting ET, as the eternalists claim that we can, then we should do so. Of course, this is a point that even the would-be temporalist should grant. What the temporalist will contest is whether the eternalist’s claim—that ET best does the work it is invoked to do—is correct. Temporalists can defend temporalism by arguing that this claim is *not* correct and that, in order to best do such work, we really do need to appeal to temporary propositions after all, as well as maybe temporary facts, potentially obscure or not.

The story with inconstancy and INC-S is much the same. If temporary propositions are obscure or metaphysically weird in some noxious sense, then inconstant

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4 See, for example, Richard 1981.
5 See my methodological comments in Chapter 1, Section 1.4.
propositions—and, if they are required to make sense of such things, inconstant facts—are almost certainly even more so. After all, where we might have some idea of what it would be for a proposition to be true or false, or for a fact to obtain or not, relative to a time, it might not be clear at all what it would be for a proposition to be true or false, or for a fact to obtain or not, relative to a scheme. If avoiding needless obscurity and mystery is theoretically virtuous, then, again, we ought to avoid talk of inconstant propositions inasmuch as we can. Moreover, friends of the shallow view might also point to the linguistic data, arguing that accepting INC-S is the best way to make sense of various kinds of reports.

If we can avoid obscurity and better account for the linguistic data by adopting INC-S, then we should do so. Of course, friends of the deep view and the shallow view alike should grant this; once again, the real point of disagreement is over the correctness of the claim that INC-S really best does the work that it is invoked to do. Friends of the deep view can attack the shallow view by arguing that it doesn’t, and that to best do such work, we really do need to appeal to inconstant propositions, as well as maybe inconstant facts, potentially obscure or not.

My goal in discussing ET is to draw parallels with INC-S. I do not intend to enter into the debate between temporalists and eternalists here, aside from simply stating that I am not sure that the motivations for ET are strong enough to warrant adopting it. I do intend to enter into the debate between friends of the deep view and friends of the shallow view, as I have similar doubts about the motivations for INC-S. In Chapter 3, I argue that, upon investigation, inconstant propositions and facts are not mysterious or obscure or even all that metaphysically weird, and in Chapter 4, I consider linguistic data
that tells in favor of the deep view. For the reasons discussed in those chapters, I think that the deep view is, not only no worse off than, but ultimately preferable to any version of the shallow view.

On top of that, there are problems internal to many varieties of the shallow view. My goal in the rest of this chapter, then, is to spell out several of these varieties as charitably as possible, sorting through them in an effort to foreground the best among them, all the while pointing out challenges and objections as they creep up. In the end, I conclude that, among those considered, one variety fares better than the others.

2.3. The Shallow Subject View

Recall the Indexicals Objection from Section 1.7.2. The worry was that, if there are no χ-indexical expressions in a language, then we ought to reject the inclusion of a contextual χ parameter in the semantics of that language. So, if there are no scheme-indexical expressions in English, then we ought to reject the inclusion of a contextual scheme parameter in the semantics of English. One can respond to this worry by providing some motivation that there are scheme-indexical expressions, even if they aren’t obvious. In this section, I consider the possibility that the friend of the shallow view might find the scheme-indexical expressions she needs in subject terms.

Call the variety of the shallow view that explains the scheme-indexicality of DRMAs by locating the scheme-indexicality in the subject terms of those DRMAs the shallow subject view. Here, I consider two varieties of the shallow subject view, concluding that neither is particularly plausible.
2.3.1. Scheme Parts

Once again, it’s best to begin with a brief detour through temporality. When it comes to temporary sentences, one common strategy for accounting for the variation across time of the truth values of sentences such as

(S42) McCain is sitting.

is by adopting a temporal parts view.\(^6\) Just as objects are extended through space and have spatial parts, they are also extended though time and have temporal parts. McCain, as a temporally extended object, has temporal parts at all and only times at which he exists. Those temporal parts each exist only and entirely at certain times: if McCain exists at \(t\), he has a temporal part that exists only and entirely at \(t\), and if he exists during the interval running from \(t\) to \(t^*\), he has a temporal part that exists only and entirely from \(t\) to \(t^*\). McCain himself is the mereological sum of all of his temporal parts.

Call a property temporary just in case whether an object instantiates it depends, at least partially, on time; temporary properties are those properties that objects instantiate at some times, but not at others. Call a property eternal just in case whether an object instantiates it does not depend on time; eternal properties are those that objects instantiate simpliciter, independent of time. Objects composed of temporal parts have their temporary properties in virtue of their temporal parts having relevant eternal properties. McCain, for example, instantiates the temporary property is sitting at \(t\) in virtue of his temporal part at \(t\) instantiating that property’s eternal analogue. Thus, the truth of temporary sentences according to which McCain has certain properties bottoms out in (i) facts about which eternal properties are instantiated by which of McCain’s temporal

parts, and (ii) the time at which those sentences are uttered. (S42), when uttered at \( t \), is true just in case McCain’s temporal part at \( t \) is sitting.

As stated, this version of the temporal parts view is not quite an eternalist view. (S42) always expresses the same proposition, namely

\[
\text{(P11) McCain is sitting.}
\]

but the truth conditions of that proposition change depending on the time of utterance: (P11) is true just in case McCain’s temporal part that is concurrent with its evaluation is sitting. There is an eternalist view in the vicinity, however. Instead of adopting a view according to which ‘McCain’ refers to a sum of temporal parts, take the referent to shift depending on various temporal factors. Since (S42) is in the present tense, ‘McCain’ refers to McCain’s temporal part that is concurrent with (S42)’s utterance. On this view, when uttered at \( t \), (S42) expresses,

\[
\text{(P12) McCain-at-} t \text{ is sitting.}^{7}
\]

A sentence such as

\[
\text{(S43) McCain was sitting.}
\]

when uttered at \( t \), expresses

\[
\text{(P12) Some of McCain’s temporal parts that exist prior to McCain-at-} t \text{ are sitting.}
\]

A sentence such as

\[
\text{(S44) McCain will be sitting at noon on May 10}^{th}, 2020.
\]

when uttered at \( t \), expresses

\[
\text{(P13) McCain-at-noon-on-May-10th-2020 is sitting.}
\]

\[^{7}\text{Note that ‘is sitting’ here is to be taken as tenseless, rather than as in the present tense.}\]
Corresponding to (P11), (P12), and (P13) are certain facts about various of McCain’s temporal parts; those propositions are true just in case those facts obtain. These facts are eternal facts: they obtain or not *simpliciter*, independent of time. Accordingly, if the fact that McCain-at-ᵣ is sitting obtains but the fact that McCain-at-ᵣ* is sitting does not, then (P12) is true but

(P14) McCain-at-ᵣ* is sitting.

is not. So, given what has been said so far, (S42) is true at ᵣ in virtue of expressing (P12) at ᵣ, but false at ᵣ* in virtue of expressing (P14) at ᵣ*, with (P12) being true and (P14) being false in virtue of which eternal facts obtain. Thus, temporality.

The temporal parts view is a simple and elegant account of how to understand temporary sentences and the propositions they express in different contexts. But is there a plausible account that can make similarly simple and elegant sense of inconstant DRMAs and the propositions they express in different contexts? In what follows, I attempt to trace out such a view, which we can call the *scheme parts* view.

Consider again our earlier

(S1) McCain could have won the election.

According to the scheme parts view, (S1), as uttered in scheme ₘ, expresses

(P15) McCain-in-ₘ could have won the election.

And, as uttered in ₘ*, expresses

(P16) McCain-in-ₘ* could have won the election.

Corresponding to (P15) and (P16) are certain facts about some of McCain’s *scheme parts*. These facts are constant facts: they obtain or not, independent of scheme. Accordingly, if

---

8 One should not infer from this praise that I take the temporal parts view to be *correct.*
the fact that McCain-in-\(s\) could have won the election obtains but the fact that McCain-in-\(s^*\) could have won the election does not, then (P15) is true but (P16) is false. So, (S1) is true when uttered in \(s\) in virtue of expressing (P15) in \(s\), but false when uttered in \(s^*\) in virtue of expressing (P16) in \(s^*\), with (P15) being true and (P16) being false in virtue of which constant facts obtain. Thus, inconstancy.

Call a property *inconstant* just in case whether an object instantiates it depends, at least partially, on scheme; inconstant properties are those properties that objects instantiate in some schemes, but not in others. Call a property *constant* just in case whether an object instantiates it does not depend on scheme; constant properties are those that objects instantiate simpliciter, independent of scheme. Objects composed of scheme parts have their inconstant properties in virtue of their scheme parts having relevant constant properties. McCain, for example, instantiates the inconstant modal property *could have won the election* in \(s\) in virtue of his scheme part in \(s\) instantiating that property’s constant analogue.

But what sort of creatures are these scheme parts, McCain-in-\(s\) and McCain-in-\(s^*\)? In keeping with the analogy with temporal parts, we could say that McCain is extended not just though space and time, but also through something like scheme-space. His scheme parts are his parts that exist entirely and only in certain schemes.\(^9\) McCain-in-\(s\), then, is McCain’s scheme part that exists entirely and only in \(s\), and McCain himself is the mereological sum of all of his scheme parts. The truth of inconstant DRMAs about McCain, then, bottoms out in (i) facts about which constant properties are instantiated by which of McCain’s scheme parts, and (ii) the scheme under which those DRMAs are

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\(^9\) Or in certain related sets of schemes, akin to how certain temporal parts might exist entirely and only during certain intervals of time.
uttered.

So far, so good—except that it is not at all clear what it is for an object to exist entirely and only in one scheme rather than another, or what this “scheme space” might amount to, other than a helpful metaphor. We have an intuitive sense of what it is for an object to exist entirely and only at one time (or world, or location), but I am not confident that we can say the same about objects existing entirely and only in one scheme rather than another. If the friend of the shallow view wants to make good on the scheme parts view, she must offer a plausible account of what it is for an object to exist in such a way. This is quite a challenge, and if one of our goals is to avoid noxious metaphysics, our efforts are probably better directed elsewhere.

2.3.2. Plenitudinous Pluralism

The friend of the shallow subject view has another option. Instead of adopting the scheme parts view, she could instead adopt and make use of the metaphysical position that we can call pluralism. According to pluralism, a given region of spacetime can be exactly occupied by more than one object; say that an object \( o \) exactly occupies a region \( r \) just in case (i) every subregion of \( r \) is occupied by a part of \( o \), and (ii) every part of \( o \) occupies a subregion of \( r \). Instead of talking in terms of scheme parts that instantiate constant properties, she could instead posit multiple colocated objects—that is, objects that exactly occupy the same region of spacetime—each of which exists entirely in all schemes, and each of which instantiates a different set of constant properties. Which of these colocated objects serve as the referents of the subject terms of our DRMAs depends on the operative scheme in the context of utterance. Call this view the pluralistic view.
According to the pluralistic view, when uttered in $s$,

(S1) McCain could have won the election.

expresses

(P17) McCain, could have won the election.

but, when uttered in $s^*$, expresses

(P18) McCain,* could have the election.

where McCain, and McCain,* are colocated objects. (P17)—and hence (S1) as uttered in $s$—is true just in case McCain, instantiates the constant modal property *could have won the election*. (P18)—and hence (S1) as uttered in $s^*$—is true just in case McCain,* instantiates *could have won the election*. If only one of those facts obtains, then, as the operative scheme changes from $s$ to $s^*$, so too will the truth value of (S1). Thus, inconstancy.

The pluralistic view faces what has been called the *grounding problem*, which we can state by asking the following question: in virtue of what is it that McCain, and McCain,* exactly alike with respect to all of their nonmodal properties,\(^{10}\) differ with respect to their modal properties?\(^{11}\) I agree with Karen Bennett in believing that the best way for the pluralist to respond to the grounding problem is by adopting a *primitivist plenitudinist* view, according to which

\[
\text{every region of spacetime that contains an object at all contains a distinct object for every possible way of distributing ‘essential’ and ‘accidental’ over the [nonmodal]}^{12}\text{ properties actually instantiated there. A certain}
\]

\(^{10}\) Insofar as they are colocated objects. It is hard to imagine any way in which any colocated objects could differ with respect to any of their nonmodal properties. They might differ with respect to say, evaluative properties, but, *pace* Fine 2003 and Bennett 2004, it seems plausible to suppose that evaluative properties will depend on sortal properties, which, in my view, depend on modal properties. I say more on this in Chapter 3, Section 3.7.

\(^{11}\) For an extended (and very relevant) discussion of the grounding problem, see Bennett 2004.

\(^{12}\) Bennett actually uses the term ‘non-sortalish’ here, where the class of non-sortalish properties includes,
principle of plenitude holds; there is an object for each possible combination of modal properties. Each spatio-temporal region is, as my Australian friends would say, chocka [i.e. “chock full”]. And precisely because each region is full in this way, there is nothing in virtue of which any particular object has the modal properties it does.\textsuperscript{13}

Expanding on this a bit, we can say that, located in each occupiable region of spacetime, there is an object for every possible assignment of ‘accidentally instantiates φ’ and ‘essentially instantiates φ’ over all of the nonmodal properties φ actually instantiated there, and ‘accidentally does not instantiate ψ’ and ‘essentially does not instantiate ψ’ over all of the nonmodal properties ψ not actually instantiated there;\textsuperscript{14} the same with relations. On this view, an object’s having this or that modal property becomes a primitive matter, and since there is a plenitude of colocated objects, this primitiveness loses its bite.

As it turns out, then, the least arbitrary way for the pluralist to solve the grounding problem, Bennett claims (and I agree) is to posit a lot of colocated objects—in Bennett’s terms, bazillions of them.\textsuperscript{15} Sure, we end up with a bazillion objects, most of which are very strange, but it just turns out both that we don’t pay attention to the vast majority of them and that we don’t have to.

With this primitivist plenitudinist pluralism in mind, we complicate our story from before. When uttered in \( s \), the subject term of (S1), ‘McCain’, refers to a class of objects with certain properties foregrounded in \( s \), and thereby expresses

\begin{equation}
\text{(P19) All members of the class } M, \text{ could have won the election.}
\end{equation}

When uttered in \( s^* \), ‘McCain’ instead refers to a class of objects with certain other

\textsuperscript{13} Bennett 2004, pp. 354-355.
\textsuperscript{14} This allows us to ground the claim that a given ball that is, say, not red, is only \textit{accidentally} not red.
\textsuperscript{15} Cf. Bennett 2004, pp. 356-357.
properties foregrounded in $s^*$, so (S17) expresses in $s^*$

(P20) All members of the class $M_s$ could have won the election.

All members of both classes—$M_s$ and $M_{s^*}$—are objects colocated with one another, as well as a bazillion other objects, most of which we ignore. (P19)—and hence (S1) as uttered in $s$—is true just in case all of the members of the class of colocated objects highlighted under $s$ either (i) accidentally or essentially instantiate the nonmodal property $won$ $the$ $election$, or (ii) do not essentially fail to instantiate that property. Likewise, (P20)—and hence (S1) as uttered in $s^*$—is true just in case the analogous criteria are met, with respect to $s^*$ rather than $s$. Thus, inconstancy.

What, amidst all of these colocated objects, is McCain himself? The answer, though perhaps strange, is simple: there is no single McCain. Rather, there is a class of closely related, similar objects that, for conventional purposes, we tend to treat as one object. We tend to speak and act as though there is one object, McCain, and as though he has some of his properties inconstantly, but this is just a consequence of our habit of ignoring the fact that there are countless colocated objects, many quite similar to the supposed “ordinary object” that we might think of as “McCain himself,” each with its own set of constant properties. When it comes to talk of McCain, talk of $uniqueness$—of there being one object that is $the$ McCain—is a mere convenient fiction.

As if these metaphysical commitments of the primitivist plenitudinist view aren’t strange enough, those who adopt the view quickly finds themselves with semantic troubles, as well. Independent of scheme, ‘McCain’ will refer to a large class of colocated objects; the role of the scheme is to “narrow down” that class. The only way that I can see this working is if the scheme associates with the subject term a bit of descriptive content.

66
In schemes in which we are interested in persons, for example, *is essentially rational* gets added to the descriptive content associated with ‘McCain’, and we focus in on only those colocated objects that are essentially rational.

Even among these essentially rational beings, some could not have won the election, since there will be those that are essentially such that they did not win. Others could have won, since they only accidentally did not win. If the operative scheme is such that we focus on this class of essentially rational beings, without getting more fine-grained, it turns out that (S1) is false. In many schemes, though, we would probably be inclined to take (S1) to be true. In such schemes, then, it cannot be just *is essentially rational* that gets added to the descriptive content associated with ‘McCain’, but as much additional descriptive content as would be required to get us to the class of all and only those colocated, McCain-like objects that instantiate *won the election* either essentially or accidentally.

We can now see the problem: once we’ve fixed the class for a given subject term, our work is done. Suppose our operative scheme determines that ‘McCain’ refers to a class of objects that could have won the election. Once we’ve established that—once we’ve fixed the referent—we can clearly see that, in such a scheme, (S1) is true. As Bennett puts it, “glomming on to the thing is tricky, but once we’ve accomplished *that*, the game is over.”16 To verify the truth of our DRMAs, then, all we need do is check to see if we’ve referred to anything with our subject terms. If yes, the DRMAs in question are true; if not, they’re false.

This is bad. When we verify the truth of a DRMA, the process should involve two

---

steps: first, we see if we’ve referred to anything, and second, we see what the thing that we’ve referred to is like. The primitivist plenitudinist strategy collapses these steps, which I take to be reason enough to reject it. A proper semantics should not allow us to check to see if a given DRMA is true simply by checking to see if its subject term successfully refers. If there is more to saying something true than just successfully referring, so much the worse for the pluralist view—and there is.

To sum up so far, the shallow subject view does not look hopeful. The scheme parts view faces a very difficult challenge: offer an account of what it is for an object to exist entirely and only under one scheme rather than under another. The pluralistic view, I claim, is best cashed out as the primitivist plenitudinist view, which carries burdensome metaphysical commitments and has less than ideal consequences for the semantics of DRMAs. With these worries in mind, I think that it’s safe to conclude that, if we want to adopt the shallow view, we ought to stay away from the shallow subject version. The scheme-indexicality that the shallow view posits should not be pinned on the subject tem.

2.4. The Shallow Predicate View

Another strategy—perhaps the most popular, as we’ll see—is to pin the scheme-indexicality on the predicate. We can call such a view, appropriately, the shallow predicate view. In this section, mirroring the last, I look at two versions of such a view and the problems they face.

2.4.1. Abelardian Predicates

Let’s start with Harold Noonan’s Abelardian predicate view. According to this view,
modal predicates are *Abelardian*,\(^\text{17}\) which is to say that the content of a modal predicate \(P\) depends in part on the sense of the subject term to which \(P\) is attached.\(^\text{18}\)

Consider a statue named ‘Statue’ and a lump of clay named ‘Lump’, and consider the following sentences:

\[
\begin{align*}
(S45) & \quad \text{Lump could survive being squished.} \\
(S46) & \quad \text{It is not the case that Statue could survive being squished.}
\end{align*}
\]

If (S45) and (S46) are both true—and they both seem to be, given that statues in general can’t survive being squished while lumps of clay in general can—it might be tempting to conclude that Statue and Clay are, by Leibniz’s Law, distinct. If we take the predicates to be Aberlardian, however, we are able to block such an inference, since the senses of the names cause the predicates to express different properties. On such a picture, the predicate ‘could survive being squished’, when attached to the name ‘Statue’, denotes the property \textit{could be squished and continue being a statue}. When attached to the name ‘Clay’, that same predicate denotes the property \textit{could be squished and continue being a lump of clay}. (S45) and (S46) thereby respectively express

\[
\begin{align*}
(P21) & \quad \text{Lump could be squished and continue being a lump of clay.} \\
(P22) & \quad \text{It is not the case that Statue could be squished and continue being a statue.}
\end{align*}
\]

Both of these propositions could be true even if Statue and Lump are identical. In this way, we can attribute seemingly inconsistent properties to the same object without actually being inconsistent. Thus—we are told—inconstancy.

There are two immediate worries that arise upon consideration of this strategy.

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\(^{17}\) Named after Peter Abelard, who famously made use of such predicates to defend his nominalism (and, perhaps less famously, his materialism, presentism, and mereological nihilism, as well as his antirealism about natural kinds, relations, absolute space, etc.). Cf. King 2010.

\(^{18}\) Noonan 1991, p. 188.
First, we have been assuming a theory of direct reference, and we now need to make sense of *senses*. But this is perhaps not so hard: we can identify senses with what Kaplan calls *cognitive values*. Contra Frege, senses aren’t additional entities that we posit in order to do semantics, but instead *words themselves*. Kaplan says

> There are *linguistic* differences between “Hesperus” and “Phosphorus” even if there are no *semantic* differences. Note also that the syntactic properties of “Hesperus” and “Phosphorus,” for example, their distinctness as *words*, are surer components of cognition than any purported semantic values, whether objectual or descriptonal.\(^{19}\)

and also

> If words are properly individuated, by their world histories rather than by their sound or spelling, a name might also serve as its own Fregean *sinn*. The linguistic difference between “Hesperus” and “Phosphorus”—the simple difference between thinking of Venus qua *Hesperus* and thinking of it qua *Phosphorus*—may be all the difference in mode of presentation one needs in order to derive the benefits of sense and denotation theory. Word are undoubtedly denizens of cognition.\(^ {20}\)

If the Abelardian wants to avail herself of this Kaplanian strategy, she will identify the sense of an expression *with that expression itself*, and say that due to that expression’s world history, its use makes salient certain features of the entity denoted by the expression.\(^ {21}\) This way of doing things is straightforwardly compatible with direct reference, so the Aberlardian can rest easy.

> Or maybe not—there’s still the second worry. Regardless of whether this Kaplanian notion of senses will do the work the Aberlardian needs it to do, the view still runs into trouble. Often times, as in the cases we’ve looked at previously, we find cases of inconstancy *despite no change in subject term*. For example, our familiar

\(^{19}\) Kaplan 1989b, p. 599. Italics in original.
\(^{20}\) Ibid. Italics in original.
\(^{21}\) Kaplan himself does not say this latter bit, but it does seem to be something open to be said.
McCain could have won the election. is inconstant, even if we hold fixed the use of the name ‘McCain’. The same problem arises even if we consider cases that don’t involve names, such as in

He could have won the election.

If inconstancy is the result of the use of Abelardian predicates, and the contents of such predicates depend upon the senses of the subject terms to which they are attached, then sameness of subject terms would seem to imply sameness of sense, and, hence, sameness of the predicates’ contents. If this were so, inconstancy—even shallow inconstancy—would drop out of the picture.

We can fix this problem by saying that it is, not the sense of the subject term that determines the content of the predicate, but instead it is some aspect of the context. Sometimes the use of a given subject term might shift the context—the use of ‘Statue’ might make salient statueish properties and hence make operative a scheme that foregrounds such properties—but really it is the aspect of the context that is doing the work. We can now characterize Abelardian predicates by saying that a predicate $P$ is Abelardian just in case the content of $P$ depends on features of the context of $P$’s utterance, particularly the operative scheme. This move allows us to get a difference in the content of the predicate across contexts despite sameness of the subject term, as long as the schemes of those contexts are themselves different.

But this is no real progress, as it just amounts to saying that a predicate is Abelardian just in case it is scheme-indexical, and merely saying that doesn’t count as an explanation of how these predicates work. It is also to give up on the letter of the Aberladian view, since, on such a view, the content of an Abelardian predicate depends
on the *sense* (or cognitive value) of a subject term. But as we’ve just seen, if we want to be able to account for the inconstancy of sentences such as (S1) and (S47), we need to say that what the content expressed by an expression in a context really depends on is the operative scheme of that context. As such, the friend of the shallow predicate view can’t get what she needs by going Abelardian; she still needs to explain the scheme-indexicality of the predicates of inconstant DRMAs.

2.4.2. Counterpart Theory

If we want to explain the scheme-indexicality of such predicates, we might avail ourselves of what is in fact the most well-known and popular of extant accounts of inconstancy, *counterpart theory*. According to counterpart theory, modal predicates are something like shorthand for expressions denoting similarity-based counterpart relations. There are many counterpart relations that each foreground different features; there is, for example, the *statue-counterpart relation*, which relates an object to all of those things that are relevantly similar to it *qua* statue; the *clay-counterpart relation*, which relates an object to all of those things that are relevantly similar to it *qua* lump of clay; the *person-counterpart relation*, which relates an object to all of those things that are relevantly similar to it *qua* person; and so on. Which counterpart relation a given modal predicate expresses depends on relevant contextual features—in our framework, the operative scheme. For example, in a context in which the operative scheme $s$ foregrounds

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22 Lewis is not explicit that the contents of ordinary modal sentences are propositions containing counterpart relations, but I do not think it is unfair to attribute this claim to him. For Lewis, ordinary modal sentences can be translated *salva veritate* into sentences of counterpart theory. Given his modal reductionism, it is clear that Lewis thinks that the counterpart-theoretic sentences are in some sense more basic than the modal sentences. Sentences of counterpart theory, I take it, express propositions containing counterpart relations. So the truth of ordinary modal sentences is at bottom a matter of the truth of propositions containing counterpart relations.
personal political history and experience,

(S1) McCain could have won the election.

expresses something like

(P23) McCain has a political-history counterpart who won the election.

In a context in which the operative scheme $s^*$ foregrounds the state of the economy and general morale in the United states in 2008, (S1) instead expresses something like

(P24) McCain has a political-climate counterpart who won the election.

Insofar as we would take (P23) to be true, we ought to take (S1), as uttered in $s$, to be true as well. Insofar as we would take (P24) to be false, we ought to take (S1), as uttered in $s^*$, to be false. Thus, inconstancy—and this time, our account works even though the subject terms are identical, and even if we were to use a term other than a name, such as in (S47).23

Of course, for about as long as counterpart theory has been around for discussion, Saul Kripke’s famous objection to it—the so-called Humphrey Objection—has been discussed as well.24 Kripke’s original presentation of the objection is as follows:

[According to counterpart theory, if] we say ‘Humphrey might have won the election (if only he had done such-and-such)’, we are not talking about something that might have happened to Humphrey, but to someone else, a “counterpart.” Probably, however, Humphrey could not care less whether someone else, no matter how much resembling him, would have been victorious in another possible world. Thus, Lewis’s view seems to me even more bizarre than the usual notions of transworld identification that it replaces.25

Note that Kripke says that, when the counterpart theorist takes herself to be talking about

23 For more detailed discussion on the motivations and mechanics of counterpart theory, see Lewis 1968, 1971, and 1986.
24 For more discussion on the Humphrey Objection, see Plantinga 1974; Hazen 1979; Kraut 1980; Lewis 1986; Sider 2003, ms.; and McGlone ms.
what might have happened to Humphrey, she is instead talking about what *might have happened* to someone else, namely one of Humphrey’s counterparts. But this is not at all what the counterpart theorist would say. Instead, she would say that, when she is talking about what might have happened to Humphrey, she is talking about what *does happen* to someone else. As such, it is common to interpret Kripke as having made a simple mistake, having instead meant that “we are not talking about something that [happened] to Humphrey, but to someone else” and that “Humphrey could not care less whether someone else, no matter how much resembling him, [was] victorious in another possible world.” This is perhaps the most charitable way to go, as it seems far more likely that Kripke made a quick and simple error than it is that he failed to understand the basics of the position to which he was objecting.

But, even with that straightened out, it is still not clear how we should understand the Humphrey Objection in the first place. Ted Sider discusses two very closely related interpretations of the Humphrey, one according to which counterpart theory is “inconsistent with the significance we invest in modal judgments” and the other according to which counterpart theory “gives an intuitively implausible analysis of everyday modal judgments.” I address these in turn.

Perhaps the Humphrey should be taken as the objection that counterpart theory is inconsistent with the significance we invest in modal judgments. Consider

\[(S48) \text{ You could be maimed by a tiger tomorrow.}\]

This sentence probably has some significance to you (and, if not, it probably should).

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26 Except for in the trivial sense in which anything that *does* happen to someone *might* happen to them as well.
28 Sider ms., p. 1.
Now consider

(S49) Someone else will be maimed by a tiger tomorrow.

While probably having some sort of significance to you, (S49) probably does not have the same sort of effect on you as does (S48). There is, after all, something far more immediate and troubling to you about the claim that you could be maimed by a tiger than there is about the claim that someone else will, especially if that someone else is distant and unknown. Even if both claims are troubling, say, because they evoke fear, they certainly evoke different sorts of fear. On the face of it, then, our attitudes toward (S48) and (S49) are quite different. As such, if counterpart theory tells us that (S48) just amounts to (S49), counterpart theory is inconsistent with our current attitudes regarding modal judgments.

If this is correct, we have two options. First, we could start caring about (S48) in the same way as we care about (S49), which is to say that we would start caring less about (S48). Second, we could start caring more about (S49). The first option seems unacceptable given that it would require us to stop caring about ourselves as much as—or at least in the same way as—we currently do. The second option seems unacceptable insofar as it would require us to start seriously caring about things that we do not currently care about (in the relevant way). Unfortunately, neither of these options seems acceptable. In addition, we have no principled reason to pick one over the other, making the choice arbitrary—and arbitrary choices are problematic. So, upon accepting counterpart theory, we find ourselves forced to deal with this inconsistency among our modal attitudes. Call this interpretation of the Humphrey the *Attitude Objection.*

29 Or, in Lewis's case, otherworldly!
More often, the Humphrey is interpreted as being about a conflict with modal *intuitions* rather than with modal *attitudes*. Again, as Sider says, the Humphrey might be interpreted as the objection that counterpart theory “gives an intuitively implausible analysis of everyday modal judgments.” Elsewhere, he writes that the Humphrey might be interpreted as the claim that “it is *obvious* that possibly winning is not the same as having a counterpart who wins.” This is one way that Lewis interprets the objection: “it is sometimes thought that ersatzism is better off than counterpart theory in respecting certain intuitions: intuitions that *de re* modality has to do with the *res* itself, not some imitation or substitute or counterpart.” Michael McGlone puts the matter similarly when he says that

As I understand him, Kripke’s core observations here are straightforward: first, that according to [counterpart theory], its being the case that Humphrey might have won is fundamentally a matter of there being some other individual a lot like him who does win; second, that this is intuitively bizarre in that it conflicts with commonsense views regarding the nature of modality.

and

In front of me there is an empty pizza box. It is intact, but it could have been shredded and strewn all over the place in some particular way. [The counterpart theorist] tells us that its being the case that this pizza box *could have been* shredded and strewn all over the place in that very way is fundamentally a matter of there being some other pizza box a lot like this one that *is* shredded and strewn all over some other place in that way. But, ordinarily, we would think that this is not so. In fact, we would ordinarily think that its being the case that this pizza box *could* have been in the state in question is not at bottom a matter of there being *anything*—a lot like this pizza box or otherwise—that is in that state. In that it comes into conflict with what we would ordinarily think about such matters, [the counterpart theorist’s] overall account of *de re* modality is intuitively

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30 Sider ms., pp. 1-2. Italics in original.
31 Lewis 1986, p. 195. *Ersatzism* is a blanket term Lewis uses to name those positions that take possible worlds to be abstract entities such as propositions, properties, states of affairs, and the like; see Chapter 3 of Lewis 1986.
32 McGlone ms., p. 3.
bizarre.\textsuperscript{33}

In another context, Julian Dodd says “I find it counter-intuitive to suppose that a claim about how things could have stood with α really concerns how things stand with another object: a world-bound α-counterpart.”\textsuperscript{34} These sentiments all seem to point to the same interpretation of the Humphrey; call this interpretation the \textit{Intuition Objection}.

It is worth pausing for a moment to reflect on just how counter-intuitive counterpart theory can be. McGlone suggests that counterpart theory counts the following inference as valid:

\begin{align*}
\text{(S50)} & \quad \text{This pizza box in front of me could have been shredded.} \\
\therefore \text{(S51)} & \quad \text{Something is shredded.}
\end{align*}

While this is obviously an intuitively invalid inference, it is \textit{not} one that the counterpart theorist need claim to be valid. While a counterpart theorist of Lewis’s stripe—one that takes counterparts to be concrete objects in other concrete possible worlds—would be committed to the validity of such an inference, a more sober counterpart theorist—one who trades in \textit{abstracta} that either represent something’s being a certain a way or are represented as being a certain way—would be committed to saying that either the inference from (S50) to

\begin{align*}
\text{(S52)} & \quad \text{Something represents this pizza box as being shredded.}
\end{align*}

or the inference from (S50) to

\begin{align*}
\text{(S53)} & \quad \text{Something is represented as shredded.}
\end{align*}

is valid. But, we’ve simply moved from one frying pan to another, since, intuitively, neither of these inferences is valid, either.

\textsuperscript{33} \textit{Ibid}, p. 3-4. Italics in original.
\textsuperscript{34} Dodd 2007, p. 18. Italics in original.
The Attitude Objection and the Intuition Objection are probably related, since our attitudes and intuitions themselves are probably related. Perhaps our intuitions are grounded in our attitudes; if so, then the Intuition Objection just reduces to the Attitude Objection. Or perhaps our attitudes are grounded in our intuitions; if so, then the Attitude Objection just reduces to the Intuition Objection. Given the plausible assumption that conflicted attitudes are undesirable, we find ourselves rationally compelled to revise either our attitudes and, hence, our intuitions (if attitudes are grounded in intuitions), or our intuitions and, hence, our attitudes (if intuitions are grounded in attitudes). Either way, our current modal practice—in particular, our practice of uttering and evaluating de re modal attributions—would not survive the acceptance of counterpart theory.\(^{35}\) Since our current modal practice is far more ingrained in our everyday practices (philosophical or not) than is counterpart theory, we should not accept counterpart theory. The cost would simply be too high.

In response to these worries, Sider says

It must be granted that the average non-philosopher might find the counterpart-theoretic analysis unfamiliar, and perhaps surprising, but if this were an obstacle then few philosophical analyses of any sort would be possible. We must not demand of a correct analysis that it be immediately recognizable as such by any competent speaker—we learned this from the paradox of analysis. Our demands must be more modest: the analysis must fit most of our usage of the term being analyzed, it must not be too \textit{ad hoc}, it must presuppose no objectionable ontology or primitive notions, and so on.\(^{36}\)

Sider also says, of (what I am calling) the Attitude and Intuition Objections,

[These are] just the paradox of analysis. A reasonable person can care about a property under one description (“possibly winning”) while not caring about the same property under another description (“having a

\(^{35}\) I owe this way of putting this point to Robert Kraut.

counterpart who wins"), provided it is not obvious that the descriptions pick out the same property. Correct analyses need not be obvious to competent language users.  

The problem with these responses—aside from that, in addition to the fact that it’s not just the average non-philosopher that finds counterpart theory counter-intuitive, but also many philosophers—is that what is going on in these objections is not clearly the same as what is going on in the paradox of analysis. The paradox of analysis comes up, as Sider mentions, in cases in which the analysis of a given concept is not “immediately recognizable” to the speaker. For example, if knowledge just is justified, true belief, it would seem that that fact should be obvious to any competent user of the term ‘knowledge’, but it’s not; hence the paradox. The problem that the Attitude and Intuition Objections point to is, not that counterpart theory fails to meet the highly stringent demand that its analyses be immediately recognizable as correct by any competent speaker, but instead that it fails to meet the more reasonable demand that its analyses not be immediately taken as incorrect by the majority of competent speakers. When we focus on that more reasonable standard, Sider’s response fails and the Attitude and Intuition Objections retain their bite.

Why would we think that requiring that our analyses not be immediately taken to be incorrect by competent speakers is a reasonable standard, while requiring that our analyses be immediately recognizable as correct to competent speakers is not? Suppose I am in front of a panel of competent users of the term ‘knowledge’. I present to them the following analysis: “knowledge just is justified, true belief.” They aren’t convinced, but we’re used to this. We’ve long since accepted the fact that we have to argue in favor of

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37 Sider ms., p. 2.
(most of) our analyses, and enforcing a standard according to which analyses must be immediately recognizable as correct by competent speakers would go against our practice to a large degree. But suppose now that I present them a different analysis: “knowledge just is justified, false belief.” Not only are they not convinced, but they recoil and grimace. They say “look, I might not know much about knowledge, but I do know it’s not that.” We reject this analysis, then, since we’ve also long since accepted the fact that our analyses must, to a degree, save the data, i.e. accord with intuitions (and perhaps attitudes) about how the terms in question are used. So, if we enforce a standard according to which analyses must not be immediately taken to be incorrect by competent speakers, we are not going against our practice but instead acting in accordance with it. If this is correct, the counterpart theorist cannot avoid the Attitude and Intuition Objections by treating them merely as yet more instances of the familiar paradox of analysis.

The question of whether the Humphrey Objection is best understood as the Attitude Objection, or as the Intuition Objection, or as both, or as neither, is ultimately not very interesting. Regardless of matters of Kripke exegesis, these objections are objections to counterpart theory, and, on top of that, they are powerful objections. Insofar as they are powerful objections to counterpart theory, they are powerful objections to the most popular way of spelling out the shallow predicate view, the shallow view, and even the phenomenon of inconstancy itself.

2.4.3. The Direct Approach

Counterpart theory is but one way of making good on what the Abelardian view set out to

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38 One might think that the way a term is used determines which concept it actually picks out, so if our analysis does not fit well with the usage of a term, we might very well be analyzing the wrong concept.
do: explain the scheme-indexicality of the predicates of inconstant DRMAs. As we’ve seen however, it runs into difficult problems. It’s also quite complicated. As such, one might wonder: why pursue a complicated, problematic strategy if there is a more direct approach that might be taken?

Perhaps the predicates of inconstant DRMAs are scheme-indexical insofar as they express different *scheme-relativized constant* properties in contexts that differ with respect to scheme, where a *scheme-relativized constant property* is a constant property of the form \( \Phi \)-in-\( s \). In contexts in which the operative scheme \( s \) foregrounds political experience and personal achievements, our familiar

(S1)  McCain could have won the election.

expresses

(P25)  McCain could-have-won-the-election-in-\( s \).

In contexts in which the operative scheme \( s^* \) foregrounds the state of the economy and national morale in 2008, (S1) instead expresses

(P26)  McCain could-have-won-the-election-in-\( s^* \).

McCain instantiates *could-have-won-the-election-in-\( s \)* but not *could-have-won-the-election-in-\( s^* \)*, so (P25) and (P26) are true, and constantly true. With \( s \) operative, (S1) expresses (P25) and is thereby true, but with \( s^* \) operative, it expresses (P26) and is thereby false. Thus, inconstancy, and shallow inconstancy at that—we use inconstant language to describe a constant reality. In light of its direct approach, we can call this approach the *Direct Approach*.

A similar strategy has been suggested when it comes to temporary properties, as a way of solving the so-called Problem of Temporary Intrinsics: how can the same object
have an *intrinsic* property\(^{39}\) at one time and not at another?\(^{40}\) If, at \(t\), I utter

(S42) McCain is sitting.

and at \(t^*\), I utter

(S54) McCain is not sitting.

and the property *is sitting* is an intrinsic property, how have I not just asserted contradictory claims?

Using an analogously and equally direct approach as the one suggested above, we might simply say that, when uttered at \(t\), (S42) expresses

(P27) McCain is *sitting-at-\(t\).*

and, when uttered at \(t^*\), (S54) expresses

(P28) It is not the case that McCain is *sitting-at-\(t^*\).*

Since (P27) and (P28) are consistent, we face no Problem of Temporary Intrinsics.

The same goes for the supposed Problem of Accidental Intrinsics: how can the same object have an *intrinsic* property in one world and not in another?\(^{41}\) If someone in \(w\) utters (S42) and someone in \(w^*\) utters (S54), and *is sitting* is intrinsic, have they not contradicted one another?

Again, using an analogously and equally direct approach, we say that, when uttered in \(w\), (S42) expresses

(P29) McCain is *sitting-in-w.*

but, when uttered in \(w^*\), it instead expresses

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\(^{39}\) What is an *intrinsic* property? Lewis (1986, p. 61) offers the following gloss: intrinsic properties are properties “which things have in virtue of the way they themselves are.” Intrinsic properties are to be distinguished from *extrinsic* properties, “which things have in virtue of their relations or lack of relations to other things.” There are many ways of making these characterizations more precise, but for our purposes, Lewis’s gloss will suffice.

\(^{40}\) For more discussion, see Lewis 1986, pp. 202-204; and Haslanger 2003.

\(^{41}\) For more on this problem, see Lewis 1986, pp. 198-209.
(P30) McCain is sitting-in-w*.

Since (P29) and (P30) are consistent, we face no Problem of Accidental Intrinsics.

Lewis balks at both of these strategies. McCain’s sitting or not sitting is a matter of his shape, and, by Lewis’s lights, on both of the strategies mentioned above, it turns out that the relevant properties aren’t intrinsic at all, but are instead relations to either times or worlds. “How can these supposed relations be the shape of something?,” Lewis asks, going on to say that “[if] we know what a shape is, we know that it is a property, not a relation.” So, instead of opting for time- or world-relativized properties, Lewis adopts a temporal parts view to solve the Problem of Temporary Intrinsics and counterpart theory to solve the Problem of Accidental Intrinsics.

Putting aside the fact that Lewis’s objection here—that shapes are not relations—comes more in the form of an assertion than as the conclusion of any argument, the friend of the Direct Approach for the shallow predicate view need not worry, and they certainly should not now feel the need to go back and make sense of the Scheme Parts view or some new version of counterpart theory that equips us with counterpart relations defined on scheme-bound individuals (or abstract representations of such things). This is simply because, even if it is plausible to say that shape properties and the like are intrinsic, it is highly unlikely that inconstant modal properties are intrinsic at all. It seems that the only modal properties the intrinsic status of which we ought hold sacred are—perhaps!—essential modal properties. But, given the Essence Test for constancy, such properties will be constant anyway, so we need not worry about them in this context.

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42 Ibid, p. 201.
43 Ibid, p. 204.
44 Lewis considers and rejects the modal analogue of the temporal parts view in his 1986, pp. 210-220. I will not rehearse his objections here.
45 See Chapter 1, Section 1.4.3.
There appears to be no problem with taking inconstant modal properties to be nonintrinsic, so the strategy of relativizing them to schemes seems to be in the clear. And this, of course, is all under the assumption that properties of the form $\Phi$-in-$s$ really are disguised relations in the first place. If they’re not, we were never not in the clear.

To sum up, the Abelardian view alone does not have the resources we need to fully account for inconstancy. Counterpart theory, as can be seen by considering interpretations of the Humphrey, comes with costs that are simply too high. If one wants to adopt the shallow predicate view, the best approach is the Direct Approach.

2.5. Kratzerian Modals

Let’s look at one last version of the shallow view, this time based on classic work by Angelika Kratzer. Consider the following sentences:

(S56) In view of what their tribal duties are, all Maori children must learn the names of their ancestors.

(S57) In view of what is known, the ancestors of the Maoris must have arrived from Tahiti.

Regarding sentences such as these, Kratzer says

We might say that what we have in these sentences is not an absolute ‘must’ but a relative ‘must in view of’. This relative modal phrase ‘must in view of’ has two arguments: a phrase like ‘what is known’ or ‘what is good for us’ etc., and a sentence. In the case of (S56), the first argument—some set of considerations—is what their tribal duties are, whereas the second argument—some sentential expression—is

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46 The material in this section draws heavily from Kratzer 1977.  
47 Kratzer 1977, p. 341.
(S58) All Maori children learn the names of their ancestors.

In the case of (S57), the first argument is *what is known*, whereas the second argument is

(S59) The Maoris arrived from Tahiti.

Often times, however, we get around just fine while leaving the first argument of sentences like (S56) and (S57) unstated. Instead of (S56) or (S57), we would often find ourselves uttering

(S60) All Maori children must learn the names of their ancestors.

(S61) The ancestors of the Maoris must have arrived from Tahiti.

According to Kratzer’s view, (S56) and (S57) express the same propositions as (S60) and (S61), respectively, despite the first argument remaining unpronounced in the latter two sentences. On this, Kratzer says

Sentences [(S60) and (S61)], however, provide only one such argument explicitly. It is that kind of argument which is provided by a sentence like ‘the ancestors of the Maoris have arrived from Tahiti’. The other argument, which is of the kind that would be provided by a phrase like ‘what is known’, is missing—at least it is not explicit in the sentence. Where must we look for it? The context of utterance provided it, of course. The context seemed to provide a deontic argument when I uttered [(S60)], an epistemic argument when I uttered [(S61)], … 48

The same DRMA—or at least the same spoken (or inscribed, or thought) string—can thereby be used in different contexts to express different propositions as a result of different contexts supplying different extra arguments. Thus, inconstancy.

As stated, Kratzer’s view admits of two interpretations, one of which, I argue, is much more plausible than the other. In the remainder of this section, I spell out the differences between these interpretations and argue that, if we want to adopt this Kratzerian view, we should opt for one version rather than the other.

2.5.1. Unpronounced Components

On one interpretation of Kratzer, the extra argument that is supplied by context, despite being unpronounced, is actually a component expression of the sentence. In general, we can call any subsentential expression that, when acting as a component of a larger expression, is left unpronounced an unpronounced component. In sentences such as (S60) and (S61), then, the unpronounced components are ‘in view of what their tribal duties are’ and ‘in view of what is known’, respectively. We leave these components unpronounced because context makes them obvious, such as when I leave the subject off when you are the only person in the room with me and I utter

(S62) Come look at this!

or any such command.

The first thing to note about this interpretation of Kratzer’s view is that, strictly speaking, it gives up on inconstancy. The DRMAs we utter in different contexts to express different propositions are actually distinct DRMAs. The differences between them are left unpronounced, so they might appear to be the same DRMA—after all, they are the same spoken (or inscribed or thought) string—but, if made fully explicit, we see that they are in fact different DRMAs. Is this to give in to total constancy, which I have already ruled out?\(^{49}\) Not really. Even though we get constancy across the board with respect to DRMAs, we still get inconstancy in the pronounced strings, and that’s enough to generate the observable aspect of the phenomenon.

The second thing to note is that, on this interpretation, the view runs into trouble with anaphoric reference. It seems safe to assume that the objects of reference, including

\(^{49}\) See Chapter 1, Section 1.4.
anaphoric reference, are *contents*. It also seems safe to assume that, if there is a content present, we should be able to refer to it. If these assumptions are both correct, we should be able to test whether a sentence expresses a proposition that has a constituent contributed by an unpronounced component expression by conjoining that sentence with another sentence that contains an expression that purports to anaphorically refer back to the constituent in question. We can make the test more fine-grained and check for the presence of specific kinds of constituents by attributing some different properties or relations to the referent of the anaphoric expression. If such a conjunction is felicitous (and grammatical, non-contradictory, etc.), this counts as evidence in favor of the presence of an unpronounced component. If not, we have evidence against these being such a component.\(^{50}\)

Consider the following sentences:

(S63)  \(?Rain \text{ is wet, and it is accessible from itself in S4.}\)\(^{51}\)

(S64)  \(?McCain \text{ could have won the election, and it is such that personal background and accomplishments are weighted more heavily than contemporary political climate.}\)

If (S63) expresses a proposition that has a world as a constituent contributed by an unpronounced component, then the ‘it’ in the second conjunct can anaphorically refer to that world. We can tell that we’re looking specifically for a *world* constituent due to the fact that we’re attributing *is accessible from itself in S4*, a property had only by worlds, to

\(^{50}\) This test is based on the material found in Cappelen and Lepore 2005, Chapter 6. Note that Cappelen and Lepore take these results to count against Binding Arguments such as those offered in Stanley and Szabó 2000a and 2000b. While I need not commit myself to these arguments showing that Binding Arguments do not work in general, I do take them to show that such arguments do not work in cases of inconstancy.

\(^{51}\) I represent a sentence’s failing to meet these criteria by including a ‘?’ at its beginning.
the purported referent of the anaphoric pronoun. If (S63) is felicitous, then, we have some evidence that such sentences are world-indexical. Likewise, if (S64) expresses a proposition that has a *scheme* as a content contributed by an unpronounced component, then the ‘it’ in the second conjunct can anaphorically refer to that scheme. We can tell that we’re looking specifically for a scheme constituent due to the fact that we’re attributing *is such that personal background and accomplishments are weighed more heavily than contemporary political climate*, a property had only by schemes, to the purported referent of the anaphoric pronoun. If (S64) is felicitous, then, we have evidence that such sentences are scheme-indexical. Neither (S64) nor (S64) is felicitous, however, so in neither case do we have any such evidence. If we don’t have any such evidence, we ought not conclude that such sentences are world- or scheme-indexical, respectively.

Perhaps the problem is that the infelicitousness of sentences such as (S63) and (S64) is not actually the result of failed anaphoric reference at all. Rather, it’s the result of mixing natural language with theoretical language. When we have a sentence the first conjunct of which is in plain old English and the second conjunct of which is in fancy technical language, of course people are going to think it sounds funny.

Can we find sentences of entirely natural language that run into the same problems as (S63) and (S64) seemed to? Probably not with worlds, since talk of worlds is fancy theoretical language through and through. But we might be able to do so with schemes. Consider, for example,

(S65) ?McCain could have won the election, and it reflects my interests.

If (S65) were felicitous, the ‘it’ in the second conjunct would anaphorically refer back to

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52 Cf. Hazen’s (1979) response to Kripke’s Humphrey Objection.
the scheme that is the content of the purported unpronounced component in the first conjunct. But it’s not, so we have no evidence for the presence of such a component.

Since sentences like (S65) won’t be hard to come by, something has to give. Either we reject the unpronounced component version of Kratzer’s view or we reject one of our earlier assumptions. By my lights, the assumption that the objects of reference are contents is too plausible to give up. Should we reject the other assumption, that if a content is present, whether expressed by a pronounced or an unpronounced component expression, we should be able to refer to it? It seems perfectly clear that we can refer to contents expressed by pronounced component expressions. If we can find cases in which we can refer to contents of unpronounced component expressions, then we have good reason to hold on to this assumption, as well.

Suppose I walk up to a total stranger and initiate a conversation by uttering

(S66) I proposed, and she said ‘no’.

(S67) I painted, and it turned out nice.

(S68) I followed the recipe, but it turned out terrible.

These sentences are totally felicitous, despite the referents of ‘she’, ‘it’, and ‘it’ being unpronounced in the respective first conjuncts—‘she’ in (S66) refers to the person to whom I proposed, ‘it’ in (S67) refers to the results of my act of painting, and ‘it’ in (S68) refers to that which I was trying to cook. This gives us evidence that we can refer to the contents expressed by unpronounced components, which in turns gives us reason to hold on to our second assumption. If we hold on to both assumptions, however, we have reason to reject the unpronounced component interpretation of Kratzer’s view. After all, in

89
Maori children must learn the names of their ancestors, and they are onerous.

Likewise, in

The ancestors of the Maoris must have arrived from Tahiti, and it is the incredibly detailed result of painstaking research.

The ‘it’ does not seem to be able to refer to the scheme (what is known), either.53

2.5.2. Scheme-Indexical Modals

Instead of invoking unpronounced components, we can instead interpret Kratzer’s view as invoking scheme-indexical modals. In s,

All Maori children must learn the names of their ancestors.

expresses

All Maori children must in view of s learn the names of their ancestors.

Suppose that s is a scheme in which the tribal duties of the Maori are foregrounded. In s,

expresses

All Maori children must in view of what their tribal duties are learn the names of their ancestors.

And suppose that s* is a scheme in which such tribal duties are ignored and foregrounded instead is the biological make-up of the Maori people. In s*, (S60) instead expresses

All Maori children must in view of their biological make-up learn the names of their ancestors.

Thanks to Ben Caplan for these examples ((S69) and (S70)).
(P32) is true while (P33) is false. When uttered in s, then, (S60) is true, and when uttered in s*, (S60) is false. So, depending on whether we utter (S6) in s or s*, it will vary in truth value. Thus, inconstancy.

Let’s return yet again to our old friend

(S1)  McCain could have won the election.

Consider a scheme s, according to which personal political achievements and experience are foregrounded and the contemporary economic climate and state of national morale is ignored, and a scheme s*, according to which the economic climate and state of morale are foregrounded and the importance of personal political achievements and experience is ignored. In s, (S1) expresses

(P34)  McCain could have, in view of s, won the election.

which is true. In s*, however, (S1) expresses

(P35)  McCain could have, in view of s*, won the election.

which is false. We use the same sentence—(S1)—to express different propositions—(P34), (P35), and however many others—in different contexts that differ with respect to scheme. Inconstancy is the result of our use of inconstant sentences to describe a constant reality.

The scheme-indexical modals interpretation of Kratzer’s view is preferable to the unpronounced component interpretation insofar as it does not face the same problems with anaphoric reference. If the friend of the shallow view wants to adopt Kratzer’s approach, then, she ought to opt for scheme-indexical modals.
2.6. The Best Approach

So far, I have examined three overarching strategies that gave rise to several distinct versions of the shallow view. One of those overarching strategies is to adopt the shallow subject view; if we do so, however, we run into metaphysical challenges with the scheme parts view and both metaphysical and semantic worries with plenitudinous pluralism.\(^{54}\) Another is to adopt the shallow predicate view; if we do, however, we run into problems with both the Abelardian view and counterpart theory, so the best approach to the shallow predicate view is the Direct Approach. The third and final strategy is to adopt the Kratzerian view; if we do, I have argued that we should go for the scheme-indexical modal interpretation rather than the unpronounced component interpretation. So, in the end, it looks like the friend of the shallow view has two decent options: adopt the Direct Approach or appeal to Kratzerian scheme-indexical modals.

That’s what it looks like, but looks can be deceiving. Really, the friend of the shallow view has only one option. Suppose that we have a context the operative scheme of which is \(s\). In that context, (S1) expresses, according to the Direct Approach,

\[
\text{(P25) \quad McCain could-have-won-the-election-in-}\ s
\]

On the scheme-indexical modals interpretation of the Kratzerian view, in that same context, (S1) expresses

\[
\text{(P34) \quad McCain could have in view of }s \text{ won the election.}
\]

As we can see, on the Direct Approach, the modal predicate of (S1), ‘could have won the election’, expresses the scheme-relativized property \textit{could-have-won-the-election-in-}\(s\).

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\(^{54}\) The plenitudinous pluralist could also be said to run into metaphysical worries, insofar as she is committed to \textit{bazillions of bazillions} of colocated objects. For someone with anti-pluralistic—or even soberly pluralistic—leanings, this is surely a cost.
On the best interpretation of the Kratzerian view, the content of ‘could have won the election’ is complex, comprised of the content of ‘could have’—in this context, could have in view of s—and the content of ‘won the election’—the property won the election. In other words, the best interpretation of the Kratzerian view tells us that the content of ‘could have won the election’ is could have in view of s won the election. Is there any significant difference—or any difference at all, aside from naming conventions—between could-have-won-the-election-in-s and could have in view of s won the election?

No. The scheme-indexical modal interpretation of the Kratzerian view just is the Direct Approach. There apparent difference is only a matter of notation. Of the approaches examined in this chapter, then, the best approach for the friend of the shallow view is the Direct Approach. For the remainder of this discussion, then, when I talk about the shallow view in general, I mean to talk about the Direct Approach in particular.
Chapter 3: Deep Inconstancy

3.1. Introduction

But, then again, maybe inconstancy is more than merely a matter of getting clear on which DRMAs express which constant propositions in which contexts. If so, the phenomenon is said to be *deep*. This is the view held by friends of what I have been calling the *deep view* according to which inconstancy is taken to run deeper (hence the ‘deep’ in ‘deep view’) than the mere surface level of language: inconstant DRMAs are so in virtue of expressing inconstant propositions. My goal in this chapter is, not to conclusively argue for the deep view, but to spell it out, get it on the table, and provide some initial motivation for it. I will take myself to have been successful if I can show that the view is coherent, somewhat motivated, and not inherently unattractive. More compelling arguments in its favor can—and will—come later.¹

A quick caveat before starting: just as there are several versions of the shallow view, there are potentially other ways of spelling out views that are characteristically deep. Here, however, for the purpose of giving the view as thorough a treatment as can be given in this kind of discussion, I focus on just one. Accordingly, when I henceforth refer to the deep view, I mean to refer only to the version on offer here. I do not mean to imply that the view discussed here is the only possible version of the deep view.

¹ For these arguments, see Chapter 4.
3.2. The Deep View and Temporalism

Recall our original disjunctive characterization of inconstancy from Chapter 1:

**INC:** A DRMA $a$ is *inconstant* just in case (i) $a$ is scheme-indexical and can express different scheme-noncircumstantial (constant) propositions in contexts that differ with respect to scheme, and some of those propositions differ in truth value, or (ii) $a$ is scheme-nonindexical yet expresses a scheme-circumstantial proposition, the truth value of which can vary across circumstances that differ with respect to scheme.

As discussed in Chapter 2, the truth of INC gives rise to three possibilities:

**Possibility 1:** All inconstant DRMAs are so in virtue of satisfying condition (i); or

**Possibility 2:** All inconstant DRMAs are so in virtue of satisfying condition (ii); or

**Possibility 3:** Some inconstant DRMAs are so in virtue of satisfying (i) and others are so in virtue of satisfying (ii), and all such DRMAs satisfy one condition or the other.

For reasons already discussed, I am putting off discussion of Possibility 3 until later. In Chapter 2, I explored Possibility 1, according to which inconstancy is *shallow*. In this chapter, I explore the remaining option, Possibility 2, according to which inconstancy is *deep*.

In accepting Possibility 2, friends of the deep view accept

**INC-D:** A DRMA $a$ is inconstant just in case $a$ is scheme-nonindexical yet expresses a scheme-circumstantial (inconstant) proposition, the truth value of which can vary across circumstances that differ with respect to scheme.

What sort of commitments come along with INC-D, and what could motivate us to accept it in the first place? The best way to begin to answer these questions, I think, is, as has practically become our custom, with a quick detour through issues temporality.

Just as the shallow view is in many ways similar to eternalism, the deep view is in

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2 For the discussion, see Chapter 4, Section 4.5. For the reasons, see Chapter 1, Section 1.8.
many ways similar to *temporalism*. As such, in order to get clear—or at least clearer than we are now—on what it would be for inconstancy to be deep in the first place, it would help to draw out and make more explicit the relevant parallels.

Most everyone agrees that a certain class of sentences—which I have been calling *temporary* sentences—can vary in truth value over time, but not everyone agrees on the mechanism by which this variation occurs. The eternalist, as discussed in Chapter 2, claims that we use temporary language to express eternal propositions that describe an eternal reality made up of eternal facts. But we need not be eternalists—we could instead be *temporalists* and claim that our temporary sentences are so in virtue of expressing temporary propositions. In other words, we could adopt

**TEMP:** A sentence $s$ is temporary just in case $s$ is time-nonindexical yet expresses a time-circumstantial (temporary) proposition, the truth value of which can vary across circumstances that differ with respect to time.

According to TEMP, temporary sentences change truth value over time as a result of expressing the propositions they do independent of considerations of time, but with those propositions themselves changing truth value over time. As time goes by, the truth values of some of the propositions expressed by some of our sentences—the temporary ones expressed by the temporary ones, that is—change. Thus, temporality.

### 3.2.1. Taking Tense Seriously

INC-D and TEMP are very similar, so to see why someone might be drawn to INC-D, we can start by looking at what might draw someone toward TEMP. One common motivation for the latter is the desire to “take tense seriously.” As Dean Zimmerman puts the matter,
Seriousness about tense, as I shall understand it, is an affirmation of the ineliminability of *temporally perspectival propositions* in explications of our propositional attitudes and their linguistic expression. By ‘temporally perspectival propositions’ I mean things that play the role traditionally assigned to propositions (objects of propositional attitudes like belief, doubt, etc.; primary bearers of truth and falsehood), but that are not immutable with respect to truth-value – i.e., they are things that can be true at some times, false at others.\(^3\)

In essence, then, to take tense seriously is just to accept, for whatever reasons, the real need for *temporally perspectival*—or, have I have been calling them, *temporary*—propositions. According to Zimmerman, those who take tense seriously take tensed propositions to be ineliminable; hence, if we are to take tense seriously, temporalism is perhaps the most natural way to go.

Of course, we needn’t really go this far to motivate taking tense seriously. The way Zimmerman puts things, to take tense seriously is to take it that tensed propositions are *ineliminable*; call those who adopt such a view *strict serious tensers*. The strict serious tenser makes quite a strong claim, and one that would be quite difficult to establish. What we might have a better chance of getting, however, are reasons for thinking that it is *better* to accept tensed propositions than it is to reject them; call those who adopt such a view *moderate serious tensers*. The strict serious tenser and the moderate serious tenser agree about most things; what they disagree over is whether their position is demonstrably the only way to go. The moderate serious tenser, who is making a weaker claim, will have a much easier time defending her position—if she can show that the acceptance of tensed propositions is motivated and theoretically fruitful, and that such propositions are not problematic to the point of being too costly to bother with, then she has made a good case for taking tense seriously.

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\(^3\) Zimmerman 2005, p. 405.
I will not go into much detail here about why we might want to be serious tensers (of either sort) or why we might want to be detensers. Perhaps the issue can be settled by looking at certain linguistic data and intuitive judgments of validity;\(^4\) if only eternal propositions can get things right, then the case for taking take tense seriously would be seriously undermined. On the other hand, maybe we could see that serious tensing is both motivated and theoretically fruitful by looking at attempts to account for the apparently perspectival nature of many of our beliefs,\(^5\) or Chisholm and Zimmerman’s claim that “[what] exists is constantly changing” and that this “requires that we take tense seriously.”\(^6\) Regardless, there is a debate to be had. And, given the similarities between the debates that could be had between eternalists and temporalists, on the one the hand, and friends of the shallow view and friends of the deep view, on the other, perhaps we can find reasons to advocate for the deep view over the shallow view if we can find reasons to take inconstancy seriously in the same manner as we might take tense—that is, reasons to believe that the acceptance of inconstant propositions is motivated and theoretically fruitful, and that such propositions are not problematic to the point of being too costly to bother with. This is, of course, to set our sights on the analogue of moderate serious tensing, according to which it is better to accept inconstant propositions than it is to reject them, rather than the analogue of strict serious tensing, according to which such propositions are ineliminable. Making a case for the latter would be a daunting task; let’s start small and see where we can get.

\(^5\) See Lewis 1979, p. 146-148.
\(^6\) Chisholm and Zimmerman 1997, p. 262. For further (and quite detailed) discussion on this point, see Zimmerman 2005.
3.2.2. How to Take Tense Seriously

But let’s not get ahead of ourselves. Suppose that we do want to take tense seriously; we need to get a bit more clear on how to do so. How, we might ask, can a change in time lead to a change in the truth value of a temporary sentence? Start by considering the temporary sentence

(S71) Obama is President of the United States of America.

It is both standard and plausible to say that (S71) is true at the time at which it is uttered just in case Obama is President of the United States of America at that time. If (S71) is uttered at t and Obama is President at t, then (S71) is true; otherwise, it is false. Using the resources we have available—namely, direct reference with structured propositions— we can capture these truth conditions as follows. The subsentential expression serving as the subject term of (S71) is ‘Obama’, which has as its content (and extension) Obama himself. The subsentential expression serving as the predicate of (S71) is ‘is President of the United States of America’, which has as its content *is President of the United States of America*. Given the way in which the subject term and predicate are combined, then, (S71) expresses a proposition that is true relative to a circumstance E just in case the constituent contributed to the proposition by the subject term is in the extension of the constituent contributed to the proposition by the predicate. In other words, (S71) is true relative to E just in case Obama is in the extension, relative to E, of *is President of the United States of America*.

One promising and plausible way of making sense of temporary sentences like (S71) changing truth value over time is to first make sense of the extensions of properties

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7 See Chapter 1, Section 1.5.
changing over time. Say that properties\(^8\) determine functions from circumstances to extensions. If our circumstances are populated only by worlds, say, then the extension of a property will vary as we vary worlds but stay constant as we cut across times, locations, etc. According to temporalism, however, circumstances are correctly characterized as being populated by (at least) worlds and times, so if properties determine functions from circumstances to extensions, then the extension of a property can vary, not only as we vary worlds, but also as time goes by.

We might think of this as follows. We start with an unrestricted domain of objects that instantiate a given property \(\phi\) at any time and in any world, and then restrict that domain based on the world \(w\) of the circumstance \(E\), leaving in the domain only those objects that instantiate \(\phi\) at any time in \(w\). We then restrict again, but this time in accordance with the time \(t\) of \(E\), from the domain of objects that instantiate \(\phi\) at any time in \(w\) to the domain of just the objects that instantiate \(\phi\) at \(t\) in \(w\)\. The parameters of \(E\) zero in on the relevant set of objects, and that set counts as the extension of \(\phi\) in \(E\).

Of course, some properties will be such that, if an object is in the extension of that property at any time, then that object is in the extension of that property relative to any time at which that object exists. Consider, for example, the property is self-identical, or, if numbers necessarily exist, the property is such that \(5+7=12\). Call such properties eternal properties, in light of the fact that, if an object instantiates them, it instantiates them at all times at which it exists. Many properties, however, will be such that a given object can be in their extension at some times but not at others. Consider, for example, the properties is

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\(^8\) For the rest of this section, everything I say about properties will apply, mutatis mutandis, to relations. Note that, whereas properties will have as extensions sets of objects, relations will have as extensions sets of ordered \(n\)-tuples of objects.

\(^9\) Strictly speaking, of course, the order in which we apply these restrictions doesn’t much matter.
President of the United States of America, is sitting, or is a salesperson. Call such properties temporary properties, in light of that fact that an object can instantiate them at some times but not at others.

On this way of spelling things out, a proposition’s having a temporary property as the constituent contributed by the predicate of the sentence that expresses it is necessary for that proposition’s being a temporary proposition, but not sufficient. This can be seen by considering (S71) in contrast with

(S72) Obama is President of the United States now.

(S72), in virtue of containing the time-indexical subsentential expression ‘now’, expresses an eternal proposition. Instead, temporary propositions are those that (i) contain as constituents temporary properties contributed by the predicates of the sentences that express them, and (ii) are expressed by time-nonindexical sentences—or, more precisely, sentences that contain no time-indexical subsentential expressions.

Let’s go back to the truth conditions of the proposition expressed by (S71),

(P36) Obama is President of the United States of America.

If we have a circumstance $E$ the world of which is the actual world and the time of which is sometime in 2010, then, relative to $E$, Obama will be in the extension of the temporary property is President of the United States of America. Relative to such a circumstance, (P36) is true. (S71) inherits its truth value in a context $C$ from the proposition it expresses in $C$, so if (S71) expresses (P36) in $C$, then, if (P36) is true relative to $E$, (S71) is true in $C$ relative to $E$. But, if we have a circumstance $E^*$ the world of which is the actual world and the time of which is sometime in 1910, then, relative to $E^*$, Obama will not be in the extension of is President of the United States of America. Relative to such a
circumstance, (P36) is false, so if (S71) expresses (P36) in a context $C^*$, then (S71) is false in $C^*$ relative to $E^*$.

The change in the time of the circumstance leads to a change in the extension of the temporary property, and since the extension of the temporary property is key to assessing the truth value of a proposition containing that property as a constituent—assuming that condition (ii) from above is also met—that change can also lead to a change in the truth value of that proposition. Since we are assuming that temporary sentences inherit their truth values from the temporary propositions they express, as those propositions change truth value, the sentences that express them will change truth value, as well. If we take tense seriously, then, temporality is the result of the time-circumstantiality of certain properties—the temporary ones.

To say that an object $o$ is in the extension of a property $\varphi$ is to say that $o$ instantiates $\varphi$. If we take facts to be property instantiations,\(^{10}\) or perhaps states of affairs according to which a property is instantiated by an object, then instantiations of temporary properties are *temporary facts*, i.e. facts that can obtain at some times but not at others. At its core, then, on this way of taking tense seriously, to do so is to accept that there are temporary facts. According to the serious tenser, as time passes by, there is change with respect to which facts obtain. Temporality is thereby a phenomenon that runs far deeper than just the level of language, and getting clear on the phenomenon is much more than a mere matter of getting clear on which sentences express which (eternal) propositions in which contexts. Instead, temporality is in large part a matter of *metaphysics*, and getting clear on the phenomenon is as much a matter of getting clear on

\(^{10}\) Or the standing-in of some relation by some objects.
which sentences express which (eternal or temporary) propositions in which contexts as it is getting clear on which temporary facts obtain when—that is, which objects are in the extensions of which properties at which times.

### 3.3. Taking Inconstancy Seriously

Now that that’s all on the table, let’s shift our focus back to inconstancy. Of the few accounts of inconstancy that have been developed so far, most have been analogous in position to the detenser. But what if we instead opt to, as it were, \emph{take inconstancy seriously}, treating the phenomenon in much the same way as the serious tenser does temporality?

The question of \emph{why} we might want to take inconstancy seriously is a good one, but let’s start by figuring out exactly \emph{how} to do so. Luckily, a good portion of our work is already done, as a large part of spelling out the mechanics of the deep view is simply stating INC-D. Even so, a large part of spelling out INC-D to any satisfying degree is giving an account of what it is for a proposition to be inconstant, which will require some work. After all, what it is for a proposition to be inconstant is perhaps less intuitive than what it is for a proposition to be temporary.

Let’s start with what we already have available: inconstant propositions are propositions the truth values of which can vary across circumstances that differ with respect to scheme, and schemes are entities that encode information pertaining to, loosely speaking, which properties and relations we take to be instantiated accidentally or essentially, and how much weight we assign to each of those instantiations. Shifts in scheme, and hence, which among those bits of information play into the assessments of
the truth values of inconstant propositions, will largely depend upon our interests. Depending on how our interests shift, then, so too might the truth values of inconstant propositions and the DRMAs that express them.

Now, according to the deep view, DRMAs such as

(S74) Obama could be taller.

(S75) Obama could have been a talking kangaroo.

(S76) Obama could have lost to McCain.

all express inconstant propositions and thus propositions the truth values of which can shift alongside shifts in our interests. On the face of it, however, this might seem implausible—it’s not clear at all that whether or not Obama could have been a kangaroo has anything to do with what we’re interested in. This, however, might seem absurd—recall, for instance, Kris McDaniel’s championing of the claim that “real objects have real essences.” If whether or not Obama is only accidentally not a kangaroo depends in part on our interests, the sentiment behind that slogan goes out the window.

Perhaps that’s right—perhaps these matters of essence really are highly circumstantial. Or perhaps objects just have very sparse essences, with only the constant DRMAs expressing truths about real essences, and a lot of our talk about “essences” should really be taken very loosely. These are interesting issues; I return to them in Section 3.7. In the meantime, though, we might be able to unshroud some of these matters to at least some extent by looking at the mechanics of how schemes are supposed to play into the assigning of truth values to inconstant propositions.

Consider the inconstant DRMA

McCain could have been President of the United States of America.

The content of the subject term, ‘McCain’, is McCain himself, and the content of the predicate, ‘President of the United States of America’, is the property *is President of the United States of America*. The subject term and predicate are conjoined with a modal auxiliary verb, ‘could have been’, such that (S77) expresses a proposition that is true just in case the property serving as the content of the predicate could have been instantiated by the object serving as the content of the subject term. But this is just to say that the proposition expressed by (S77) is true just in case McCain could have been in the extension of that property. To see if this is the case, we proceed as follows. First, we introduce the notion of a *modal property*, a property that an object instantiates iff it is such that it could be (or must be, or could have been, or must have been, etc.) a certain way—*could be such and so* or *must be such and so* properties, that is, rather than *is such and so* properties. Related is the notion of a *modal relation*, relations that some objects stand in iff those objects are such that they could or must stand stand in some other relation.

Next, we first appeal to the following principles:

**M-P:** For any property $\varphi$ and object $o$, $o$ could be (or could have been) in the extension of $\varphi$ relative to a circumstance $E$ iff if there is a modal property $\varphi^*$ of the form *could be* $\varphi$ (*or could have been* $\varphi$) such that $o$ is in the extension of $\varphi^*$ relative to $E$, and $o$ must be (or must have been) in the extension of $\varphi$ relative to $E$ if and only if there is a modal property $\varphi^{**}$ of the form *must be* $\varphi$ (*or must have been* $\varphi$) such that $o$ is in the extension of $\varphi^{**}$ relative to $E$. For any $\varphi$, if a modal property is of the form *could be* $\varphi$ (*or could have been* $\varphi$), call that modal property a *weak modal transform* of $\varphi$. If a modal property is of the form *must be* $\varphi$ (*or must have been* $\varphi$), call that modal property a *strong modal transform* of $\varphi$.

**M-R:** For any relation $R$ and ordered $n$-tuple $<o_1, ..., o_n>$, $<o_1, ..., o_n>$ could be (or could have been) in the extension of $R$ relative to a
circumstance $E$ iff there is a modal relation $R^*$ of the form could stand in $R$ (or could have stood in $R$) such that $<o_1, ..., o_n>$ is in the extension of $R^*$ relative to $E$, and $<o_1, ..., o_n>$ must be (or must have been) in the extension of $R$ relative to $E$ if and only if there is a modal relation $R^{**}$ of the form must stand in $R$ (or must have stood in $R$) such that $<o_1, ..., o_n>$ is in the extension of $R^{**}$ relative to $E$. For any $R$, if a modal relation is of the form could stand in $R$ (or could have stood in $R$), call that modal relation a weak modal transform of $R$. If a modal relation is of the form must stand in $R$ (or must have stood in $R$), call that modal relation a strong modal transform of $R$.

Though perhaps cumbersome, M-P and M-R are very intuitive.\textsuperscript{12} If, for every set $\Delta$ of objects there is some property $\phi$ and some circumstance $E$ such that $\Delta$ is the extension of $\phi$ relative to $E$, then, since there is a—perhaps empty—set $\Delta^*$ of objects that could be the extension of $\phi$ relative to $E$, $\Delta$ is the extension of some property (relative to some circumstance), namely the modal property of the form could be $\phi$, which is a weak modal transform of $\phi$. Likewise, if, for every set $\Gamma$ of ordered $n$-tuples of objects there is some relation $R$ and some circumstance $E$ such that $\Gamma$ is the extension of $R$ relative to $E$, then, since there is a—perhaps empty—set $\Gamma^*$ of objects that could be in the extension of $R$ relative to $E$, $\Gamma$ is the extension of some relation (relative to some circumstance), namely the modal relation of the form could be $R$, which is a weak modal transform of $R$.

According to M-P, McCain could have been in the extension of is the President of the United States of America just in case he is in the extension of the relevant weak modal transform of that property.\textsuperscript{13} As before, we use the parameters of a circumstance of $E$ to zero in on the set of objects that will serve as the extension of could have been the

\textsuperscript{12} Though they are admittedly incomplete. A full specification of M-P and M-R would require details pertaining to all modal auxiliary verbs. Such a characterization would be incredibly complicated, however, and, for our purposes, this simplified version will suffice.

\textsuperscript{13} I say “the relevant weak modal transform” because, given the way I have formulated M-P and M-R, each property and relation will have more than one weak (as well as more than one strong) modal transform. Which one is the appropriate or relevant modal transform—could be $\phi$ or could have been $\phi$, must be $\phi$ or must have been $\phi$, etc.—is a matter that should be discernible by looking at the grammar of the original sentence.
President of the Untied States of America relative to E. We start by restricting to only those objects that instantiate that modal property in the world of E, regardless of the value of any other parameter. If we are temporalists, we then restrict to only those objects that instantiate that modal property at the time and world of E. Finally, as friends of the deep view, we restrict to only those of the remaining objects that instantiate that modal property at the time and world and on the scheme of E. Again, the parameters of E zero in on the relevant set of objects, and that set counts as the extension of the modal property in question relative to E.

Of course, some modal properties will be such that, if an object is in the extension of that property in any scheme, then that object is in the extension of that property in any scheme in which it exists. Consider, for example, the properties is essentially self-identical or, if numbers necessarily exist, is essentially such that 5+7=12. Call such modal properties constant properties, in light of the fact that if an object instantiates them at all, it instantiates them in any scheme. Many modal properties, however, will be such that a given object is in their extensions in some schemes but not in others; consider, for example, the modal properties could have won the election or could receive a promotion. Call such properties inconstant properties, in light of the fact that an object can instantiate them in some schemes but not in others. A proposition will be inconstant only if (i) the relevant modal transform of the property constituent is an inconstant property, and (ii) it is expressed by a sentence that contains no scheme-

14 Again, the actual order in which we make the restrictions won’t make a difference. If we wanted, we could restrict according to, say, scheme first, and then move to restrictions by time, and then by world.

15 I am assuming for the sake of simplicity that circumstances consist only of time, world, and scheme parameters. Should we have reason to include other parameters, we simply iterate the process just described with respect to those parameters.

16 Again, for the rest of this section, everything I say will apply, mutatis mutandis, to relations.
indexical expressions—if there are any such things.\textsuperscript{17}

Here’s an example. Consider

(P39) Obama could have been 6’4”.

(P39) is true relative to a circumstance $E$ just in case Obama could have been in the extension of \textit{is 6’4”} relative to $E$. Obama could have been in the extension of that property relative to $E$ just in case he \textit{is} in the extension of the relevant weak modal transform, \textit{could have been 6’4”}, relative to $E$. That weak modal transform is itself an inconstant property and (P39) contains no scheme-indexical expressions, so (P39) is an inconstant proposition.

Let’s go back to to the proposition expressed by (S77),

(P40) McCain could have been President of the United States of America.

and its truth conditions, which tell us that (P40) is true relative to a circumstance $E$ just in case McCain could have been in the extension of \textit{is President of the United States of America} relative to $E$. If, relative to the scheme (and world, time, etc.) of $E$, McCain is in the extension of the relevant weak modal transform of that property, then, given M-P, McCain could have been in the extension of \textit{is President of the United States of America} relative to $E$. If so, then (P40) is true relative to $E$. (S77) inherits its truth value in a context $C$ from the proposition it expresses in $C$, so if (S77) expresses (P40) in $C$, then, if (P40) is true relative to $E$, (S77) is true in $C$ relative to $E$. If McCain is not in the extension of the relevant weak modal transform relative to $E$, then (P40) is false relative to $E$, so if (S77) expresses (P40) in $C$, (S77) is false in $C$ relative to $E$. The change in the scheme of the circumstance can cause a change in the extension of the inconstant

\textsuperscript{17} More on this soon, in Section 3.5.2.
property, and since the extension of the inconstant property is key to assessing the truth value of the proposition containing the corresponding (non-modal) property, that will also lead to a change in the truth value of that proposition. Since we are assuming that inconstant sentences inherit their truth values in contexts from the inconstant propositions they express in those contexts, as those propositions change truth value, the sentences will as well. If we take inconstancy seriously, then, inconstancy is the result of the scheme-circumstantiality of certain modal properties—the inconstant ones.

Again, if we take facts to be property instantiations or states of affairs according to which a property is instantiated by an object, then instantiations of inconstant properties are *inconstant facts*, i.e. facts that obtain in some schemes but not in others. At its core, then, to take inconstancy seriously is to accept that there are inconstant facts. According to the friend of the deep view, as our interests shift and schemes shift with them, there is a change with respect to which facts obtain. Inconstancy is thereby a phenomenon that runs far deeper than just the level of language. Instead, inconstancy is in large part a matter of metaphysics, and getting clear on the phenomenon is as much a matter of getting clear on which sentences express which (constant) propositions in which contexts as it is getting clear on which inconstant facts obtain depending upon our interests, i.e. which objects are in the extensions of which modal properties on which schemes. As should be obvious by now, according to the deep view, inconstancy and temporality—as well as contingency, which we have looked at in passing—are remarkably similar phenomena.
3.4. Why So Serious About Inconstancy?

We’ve now seen how to take inconstancy seriously, but why would we ever want to do so in the first place? Perhaps we can find an answer by looking at relevant linguistic data. In fact, we can—but I save discussion of such matters for Chapter 4. Instead, in this section, I discuss a conceptual argument in favor of taking inconstancy seriously and thus a conceptual argument that I think motivates the deep view.

On the topic of modality and contingency, François Recanati introduces the following thought experiment:

Let us consider a simple language without modal operators or other means of talking about worlds; let us go further and assume that the users of the language do not possess the reflective abilities for thinking about modal issues. They entertain only non-modal thoughts such as ‘Rain is wet’. The possible-worlds semanticist who studies their language will still need to think and talk about the possible worlds relative to which the sentences of the language are evaluated (he may, for example, want to draw a distinction between contingent propositions and necessary propositions); but, contrary to what the standard extensional translation suggests, mention of the possible worlds in question will be confined to the theorist’s metalanguage.\(^\text{18}\)

When evaluating the truth value and modal status of propositions expressed by sentences in this language, Recanati’s semanticist will appeal to worlds only insofar as they serve as the values of circumstantial parameters. The worlds, it turns out, play no contextual role. This is because the sentences of such a language would be what Recanati calls *modally neutral*, which amounts saying to that they express contingent—that is, world-circumstantial—propositions.

Filling out the thought experiment some more, Recanati goes on to say:

Now suppose the users of the object-language become sophisticated and start thinking about metaphysical issues. Suppose they come to talk and

\(^{18}\) Recanati 2007, p. 67.
think about what is actually the case as opposed to what might be the case. Such modal talk can be formally represented in two ways, as we have seen tensed talk can: by using sentence operators, or by explicitly quantifying over world variables in the object-language. If we use the modal framework and introduce modal operators such as ‘actually’ and ‘possibly’, nothing will be changed for the fragment of the language that does not involve those operators. The sentence ‘Rain is wet’ will still be a simple, modally innocent sentence. The language will simply have been enriched by the introduction of new resources enabling us to construct more complex sentences. But if we use the standard extensional framework and represent modal sentences (‘It might be that …’, ‘Actually …’) by means of explicit quantification over possible worlds, as suggested above, a change of language takes place, not merely an enrichment. In the new language, all sentences (including simple sentences) now contain a hidden argument-place for a world. Modal innocence is lost.¹⁹

In short, if we adopt a quantificational account of modality in this “newly enriched object language,” it turns out that the speakers are not really speaking a newly enriched object language at all. Rather, they are speaking an entirely new language.

Of course, the “newly enriched object language” might be a new language regardless, depending on how we individuate languages, since it has operators and the unenriched language had no such things. But the important sense in which the “newly enriched object language” will be an entirely new language is that its sentences are all world-indexical, whereas the sentences of the unenriched language were not. Even simple sentences such as

(S78) Rain is wet.

are now world-indexical, whereas before the supposed “enrichment,” they were not. The form of the old sentences stays the same, but their sensitivities and content end up being quite different.

If, on the other hand, we adopt an operator account, the speakers truly are

speaking a mere *extension* of their former language. This is because, on such an account, simple sentences such as (S78) remain world-nonindexical after the enrichment. The more complex, modal sentences are simply built up out of these simple world-nonindexical sentences plus modal operators and perhaps world-indexical subsentential expressions, such as ‘actually’.

I am in agreement with Recanati that the latter is the better way to go: these speakers have merely added on to, rather than revised a substantial potion of, their language. If this is the case, then we need to maintain what he is calling “modal innocence,” and the best way of doing so is to adopt an operator account of modality with world-nonindexical sentences and contingent propositions.

Notice that Recanati’s thought experiment is set up in such a way that the linguistic community first adopts a non-modal language and then, at a later time, develops modal locutions and enriches their language. As such, the non-modal fragment of the language is *temporally* prior to the enriched modal fragment. But we could also run the thought experiment in such a way that the modal fragment developed concurrently with the non-modal fragment and the latter is, not temporally prior, but *conceptually* prior to the former. So, even if the actual development of a language like English is such that the modal fragment developed alongside the non-modal fragment, we can still help ourselves to the insights provided by Recanati’s thought experiment. If the non-modal fragment is conceptually prior to the modal fragment, we ought to adopt a view according to which sentences from the non-modal fragment are “modally neutral,” i.e. world-nonindexical.

How might we motivate the claim that the non-modal fragment is conceptually
prior to the modal fragment? Perhaps we could start by pointing out that the thought experiment presented above really seems coherent, and that, if it were at all obvious that the non-modal fragment was not conceptually prior to the modal fragment, it wouldn’t. After all, it seems safe to assume that, if the non-modal fragment is temporally prior to the modal fragment, then it must also be conceptually prior; how could we, at some time, learn a language that conceptually requires something we haven’t learned as of that time? So, if the above thought experiment even makes sense, and we think that it is possible that the speakers learned the impoverished fragment before having learned the enriched fragment, then that is good reason to believe that the impoverished fragment is conceptually prior to the enriched fragment.

Furthermore, though it is hardly conclusive, I find the following quite persuasive. Recanati says

‘Brigitte Bardot is French’ is true, with respect to a world \( w \), iff Brigitte Bardot is French in \( w \); but the sentence ‘Brigitte Bardot is French’ only talks about Brigitte Bardot and the property of being French. The world of evaluation is not a constituent of the content to be evaluated. ... The modal sentence ‘Actually, Brigitte Bardot is French’ itself can be seen as talking about the actual world as well as about Brigitte Bardot and her nationality.\(^{20}\)

Rather than providing an argument here, I take Recanati to be simply motivating the above conceptual priority claim in two ways. First, what he has said casts the conceptual priority claim as incredibly intuitive. Unless one’s intuitions have been strongly informed by an opposing theory, it would be hard to read the above quotation and then go on to deny it. Second, rather than making a normative claim about how we should view sentences such as the simple

(S79) Brigitte Bardot is French.

and the more complex

(S80) Actually, Brigitte Bardot is French.

Recanati is merely making a *descriptive* claim about the way we actually do semantics for contingent sentences in natural language.\(^{21}\) The priority of the non-modal fragment is assumed when we do modal semantics, insofar as our simplest formulas are taken to be modally neutral and the more complex ones are built up out of the simpler ones plus modal operators.

So far, I have relied upon Recanati’s thought experiment to motivate the claims that the non-modal fragment of our language is conceptually prior to the modal fragment and that we thereby ought to take sentences from the former fragment to be world-nonindexical and to express contingent propositions. This gives us good reason to (at least moderately) *take contingency seriously*, as it were. Perhaps we also see analogous reasons to take tense seriously: as Recanati claims, taking tensed sentences to be time-nonindexical and to express tensed propositions might be motivated by similar thought experiments in which we imagine primitive speakers enriching an impoverished, present-tense-only language by introducing means for talking about the past and future.\(^{22}\)

What does this all have to do with inconstancy? It’s simple: the claim that I want to make here is that the above remarks might hold for (at least moderately) taking inconstancy seriously, as well. We can, I claim, run similar thought experiments to motivate the acceptance of inconstant propositions right alongside contingent and tensed

\(^{21}\) Standardly, at least.

\(^{22}\) See Recanati 2007, pp. 68-71. Some might worry that Recanati’s original thought experiment falls through, since worlds, unlike, say, times or locations, are purely theoretical objects. I think that the fact that we can run exactly analogous thought experiments with times, however, quells this worry.
propositions. Consider the following modified thought experiment. We have a linguistic community that speaks an enriched modal language, as described before, in which speakers utter sentences such as the previously discussed

(S1) McCain could have won the election.

The linguistic practice of these speakers—including not just their language but also their evaluative practices—involves no grasp on the intricacies of conversational interests or the shifting of schemes, and they assign DRMAs like (S1) truth values uniformly across contexts. At some point in the development of and reflection upon their language, however, the linguistic practice of these speakers become more sophisticated and they begin to accept or reject (S1) in different contexts based on what we would identify, at this point, as shifts in scheme. That is, they incorporate into their practice the habit of, consciously or not, considering interests when evaluating the truth of such DRMAs. If we adopt the shallow view, according to which inconstant DRMAs are scheme-indexical, it turns out that this apparent enrichment of linguistic practice is, again, not an enrichment at all, but a real change in practice. After this change, the form of the old DRMAs, such as (S1), stays the same, but again, their sensitivities and contents end up being quite different. If we adopt a deep view, however, we are in the clear: the form and sensitivities of the old DRMAs stay the same, and the apparent enrichment of the practice really is just an enrichment after all.

We now adjust the story. Suppose that the scheme-neutral fragment of their practice (that is, the earlier, impoverished fragment pertaining only to scheme-nonindexical sentences) and the scheme-explicit fragment (that is, the later, enriched fragment) developed alongside one another. For reasons similar to those given before, it
is plausible to suppose that the former is conceptually prior to the latter, with the scheme-
explicit fragment taken to be a *conceptual extension* of the scheme-neutral fragment. The
best way to capture this, I claim, is by taking inconstancy seriously and adopting the deep
view, as it provides a way of capturing the inconstancy of scheme-nonindexical DRMAs
that express inconstant propositions.

Of course, one might outright reject Recanati’s original thought experiment, claiming that his hypothetical language never really contained any non-modal fragment to begin with. That is to say, you might have simply thought all along that, before the purported “enrichment,” even simple sentences were really world-indexical. All that changed with the “enrichment” is that the speakers learned something new about the language they had been speaking all along. Likewise, one might object to my thought experiment by claiming that my hypothetical linguistic practice never contained any real scheme-neutral fragment to begin with and that, before the purported “enrichment,” all DRMAs were really scheme-indexical. But this is just to refuse to take either contingency or inconstancy seriously from the get-go. If one finds the conceptual priority claim to be fishy, that person shouldn’t be moved by it toward taking contingency, tense, or inconstancy seriously—at least not for the reasons on offer here. For those of us who find the priority claim to be plausible and worth fighting for, taking inconstancy seriously is a good way to make good on it. And if there are independent reasons for adopting the deep view—which I think there are—then we will be able to readily avail ourselves of the conceptual priority claim, which, even if someone isn’t moved by it, is one that I doubt one would reject if, again, we had independent motivation for the resources that would allow us to make it. What I’ve done so far, then, is make just one move in a cumulative
case for adopting the deep view.

3.5. Some Potential Worries

In Chapter 1, I discussed two objections to the inclusion of a scheme parameter in the semantics for DRMAs in general: the Proliferation Objection and the Indexicals Objection. I take it that the Proliferation Objection has been adequately defused; in this section, I discuss how friends of the deep view can respond to the Indexicals Objection before introducing and discussing two other objections faced specifically by friends of the deep view.

3.5.1. The Indexicals Objection, Again

In Chapter 1, Section 1.7.2, I addressed the Indexicals Objection, according to which, if there are no scheme-indexical expressions in a given language, we should reject the inclusion of any contextual or circumstantial scheme parameters in the semantics for that language. Since English (as it is!) appears to have no such expressions, we should reject such parameters in the semantics for English.

The friend of the deep view can respond to the Indexicals Objection by pointing out that contextual and circumstantial parameters do different sorts of work. Contextual parameters play into the determination of the content of indexical expressions, whereas circumstantial parameters play into the assignment of extensions to circumstantial contents. We should take ourselves to be justified in including a parameter, whether contextual or circumstantial, in the semantics for a language if there is such work to be done and that parameter does in fact do that work. So, if the friend of the deep view can
show that, even if there is no content-determining work for a contextual scheme parameter to do, there is extension-assigning work to be done by a circumstantial analogue in the semantics for English-at-it-is, then we have a reason to accept a circumstantial scheme parameter.

To see that there is extension-assigning work to be done by a circumstantial scheme parameter, we can start by reaffirming that, if contingency, temporality, and inconstancy are really distinct phenomena, then the friend of the deep view must posit a new parameter in order to avoid conflating distinct phenomena. In Chapter 1, I attempted to motivate the claim that DRMAs shift truth values, not just alongside a shift in world or time, but alongside a shift in something else. If this is correct, the friend of the deep view has justification for the inclusion of her new parameter. If the circumstantial scheme parameter really does this extension-assigning work, we see that the claim that there are no scheme-indexical expressions in English is orthogonal to the issues at hand, and the Indexicals Objection turns out to be simply wrongheaded.

Furthermore, given the connection between contextual parameters and their circumstantial analogues discussed in Chapter 1, Section 1.5.8, if we accept a circumstantial parameter we must accept an analogous contextual parameter. So, if we find good reason to accept a circumstantial scheme parameter, we also have good reason to go ahead and accept a contextual scheme parameter, as well, even if there are no scheme-indexical expressions in the language.
3.5.2. The No Operator Objection

Jason Stanley has argued for the following principle:23

**LINK**: We should countenance a parameter of circumstances only if there is an operator that shifts it.

If we accept LINK, then unless we can identify some scheme-shifting operator in English, we are not justified in including a circumstantial scheme parameter in the semantics of English. Just as with the Indexicals Objection, insofar as it will be a largely empirical matter whether there are any such operators in English, then given LINK, it will likewise be a largely empirical matter whether we are justified in including in our semantics a circumstantial scheme parameter.24

Suppose that the friend of the deep view accepts LINK and thus accepts that empirical inquiry might and hopefully will eventually settle whether there is a circumstantial scheme parameter. Her first task would be to offer up some candidates for expressions that function as scheme-shifting operators. Of course, she might construct such operators, perhaps introducing the ‘on some schemes’ and ‘on any schemes’ operators,25 but these expressions feel just that: constructed. We must make sure that we are working with expressions that really appear in English-as-it-is. Otherwise, we are again working in extended-English, which is not the language we are interested in. So the question becomes this: are there any expressions in English-as-it-is that act as scheme-

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23 Stanley 2005, pp. 147-152. The name ‘LINK’ is my own, however.
24 Note that this point applies to any circumstantial parameter.
25 These “operators” are, of course, modeled after normal interpretations of possibility (“at some world”) and necessity (“at all worlds”) operators. Just as the friend of the deep view introduced these operators, the friend of any non-standard parameter could construct a corresponding operator. Say we introduce a parameter $\psi$. We can accordingly define two operators right away: ‘on any value of $\psi$’ and ‘on some value of $\psi$’. This is why it is important to pay attention to English-as-it-is, rather than to the various versions of extended-English, because if we allow focus on the latter, it turns out that LINK can be almost vacuously satisfied for any parameter we choose to introduce.
shifting operators?

I think that it’s plausible that there are. Some expressions that we normally think of as force modifiers might be reasonably reconstrued as operators: ‘by my lights’, ‘by anyone’s lights’, ‘on some standards’, etc. Of course, even if we construe such expressions as operators, those expressions would have to be taken as ambiguous. Consider, for example,

(S81) By some lights, McCain could have won the election.
(S82) By some lights, I know I’m not a brain in a vat.
(S83) By some lights, Italy is boot-shaped.
(S84) By some lights, the *Mona Lisa* is beautiful.
(S85) By some lights, tofu is delicious.

If we accept that ‘by some lights’ is a parameter capable of shifting circumstantial parameters, it seems that the parameters being shifted in these sentences are, respectively, schemes, epistemic standards, standards of precision, aesthetic standards, and gustatory standards. We have one expression that can play several roles, acting as different operators on different occasions of use. But this is less of a problem than it is a minor complication. So it looks like a case can be made for the existence of scheme-shifting operators in English-as-it-is and thus that the friend of the deep view can adopt a circumstantial scheme parameter while simultaneously holding on to LINK.

But maybe I’m wrong, and perhaps it’s not so plausible to take such expressions to be operators. Let’s say that the ideal linguists come in and show us that, after all, English definitely has no scheme-shifting operators. Would the friend of the deep view be out of luck? Perhaps not. MacFarlane asks us to consider the following scenario:
[Consider] what [Link] would recommend if we were doing semantics for a language devoid of modal operators or counterfactual conditionals. Since this language would not contain any world-shifting operators, [LINK] would forbid us from relativizing proposition truth to worlds. But we would still be interested in knowing how the truth value of sentences of this impoverished language depend on features of the context of use, including the world of the context. A sentence $S$ in the language—say, “Dodos were extinct in 2002”—might be true at $C_1$ (occurring at $w_1$) and false at $C_2$ (occurring at world $w_2$). The only way we could account for this without relativizing proposition truth to worlds would be to say that different propositions are expressed at $C_1$ and $C_2$. But this is highly undesirable. We would like to be able to say that a speaker at $C_1$ expresses the same proposition by $S$ as does a speaker at $C_2$, though the former speaks truly (in her context) and the latter speaks falsely (in her context). [LINK] would forbid us from saying this, and this seems to me sufficient grounds for rejecting it.\footnote{MacFarlane 2009, p. 245. See also Recanati 2007, p. 67.}

We can entertain languages devoid of world-shifting operators, but even with such languages, we, the evaluators, would still want to know how the truth of a proposition—the very same proposition—would differ when expressed by a sentence uttered by a speaker in one world rather than by a speaker in another. If we take such questions seriously when considering such languages, we are allowing that there can be a world parameter in a language’s circumstances of evaluation even if that language has no world-shifting operators. There seems to be nothing special about world-shifting operators in this case, as opposed to say, time-shifting operators, so the allowance seems to generalize: there can be a $\psi$-parameter in the circumstances of evaluation for a language even if that language has no $\psi$-shifting operators. If this is correct, we have good reason to reject LINK.

We can conclude that, while it might be a largely empirical matter which operators appear in a language, there is not the strict connection between operators and circumstantial parameters that has been proposed by Stanley. I will proceed, then, on the
assumption that, even if the presence of operators is discovered by largely empirical means, our inventory of parameters is a theoretical choice. If our best account of DRMAs, in English-as-it-is, makes use of a circumstantial scheme parameter, then we should accept that parameter despite the possible lack of scheme-shifting operators in that language—assuming that it does really lack such operators.

3.5.3. The Incompleteness Objection

Gottlob Frege famously wrote

Now is a thought changeable or is it timeless? The thought we express by the Pythagorean theorem is surely timeless, eternal, unvarying. But are there not thoughts which are true today but false in six months’ time? The thought, for example, that the tree there is covered with green leaves, will surely be false in six months’ times. No, for it is not the same thought at all. The words ‘This tree is covered with green leaves’ are not sufficient by themselves to constitute the expression of thought, for the time of utterance is involved as well. Without the time-specification thus given what we have is not a complete thought, i.e. we have no thought at all. Only a sentence with the time-specification filled out, a sentence complete in every respect, expresses a thought. But this thought, if it is true, is true not only today or tomorrow but timelessly.27

In order for a proposition—which Frege here calls a thought—to really be a proposition, it must be completely specified. For Frege, in order for a proposition \( p \) to be completely specified, when \( p \) is expressed by a sentence \( s \), the time of utterance must play into \( p \)’s being expressed by \( s \).28

Bringing this into our framework, one might claim that all propositions, in order to be full-fledged propositions at all, must have a scheme constituent. Thus,

(S1) McCain could have won the election.

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27 Frege 1918, p. 343 (page reference to 1997 reprint.)
28 See also Salmon 1989, p. 372.
uttered in a context the operative scheme of which is \( s \), expresses something like

\[(P41) \text{ In } s, \text{ McCain could have won the election.}\]  

The same sentence in a context the operative scheme of which is \( s^* \) instead expresses something like

\[(P42) \text{ In } s^*, \text{ McCain could have won the election.}\]

If this is correct, (S1) expresses different constant propositions in different contexts. This is anathema to the deep view—in fact, it’s the shallow view.

Of course, all of this hinges on the claim that, for a proposition to be complete, it must contain a scheme as a constituent. But why think this? After all, as MacFarlane points out, we don’t require that a proposition include a reference to a world in order to be complete, so we already let some apparent incompleteness slide. Why afford only worlds this special treatment? Why not also afford it to times, as does the temporalist, or to schemes, as would the friend of the deep view?

I take it that the conceptual motivations for the deep view offered earlier give us some reason to afford this treatment to schemes. But here is some additional motivation for the claim that propositions do not always contain a scheme as a constituent. Start with the motivation of the parallel claim pertaining to worlds. McCain, in the actual world, believes that he is a politician. In some merely possible world that differs from ours in many ways, McCain also believes that he is a politician. Now ask the following question: do actual McCain and merely possible McCain share the same belief? If the world is built into the content of our beliefs, then the answer to that question would be “obviously not.”

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29 The time would also appear in the proposition; with this noted, I leave it suppressed for the sake of simplicity.

30 MacFarlane 2009, pp. 243-244.
Since the answer to the question is not “obviously not”—in fact, a much more common answer is a flat-out “yes”—we have some reason to believe that not all propositions contain worlds as constituents.\(^{31}\)

A similar argument can be made with regard to schemes. Suppose that McCain, in \(s\), believes that he could have won the election, and that, in \(s^*\), he also believes that he could have won the election. Does McCain have the same belief in \(s\) and \(s^*\)? If schemes are always constituents of the content of our beliefs, then the answer to that question would again be “obviously not.” But should the answer be so quick and easy? It’s hard to say, as the case is not as clear as the case involving worlds. Here, though, is a consideration that I think counts against the “obviously not” answer. McCain, in \(s\), believes that he could have won the election. Does it make sense to ask “would McCain still believe \textit{that} in \(s^*\)”? It seems to me that it does, and if the ‘that’ refers to the content of McCain’s belief in \(s\), it suggest that McCain can have the same belief—that he could have won the election—in either scheme. This gives us some reason to believe that the contents of our beliefs—propositions—might be neutral with respect to scheme. Notice I said “gives us some reason to believe”; I have not attempted here to offer a knockdown argument, but I do believe that the friend of the deep view at least has her foot in the door.

3.6. Relativism?

According to the deep view, our previous

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\(^{31}\) Intuitions might be different in this case if we accept counterpart theory. After all, McCain’s belief that \textit{he} is a politician is mostly plausibly not the same as his counterpart’s belief that \textit{he}—the counterpart—is a politician. Since I take the objections raised against counterpart theory in Chapter 2, Section 2.4.2. to be decisive, however, I am willing to set this to the side.
McCain could have been President of the United States of America. expresses a proposition that is true relative to some circumstances and false relative to others. On the face of it, then, it might look like the deep view is a form of relativism. Are friends of the deep view relativists? The answer depends, of course, on what you mean by ‘relativism’, as that term has been applied to several different doctrines. In this section, I consider whether the deep view is relativistic in the sense that I consider whether it is the same kind of view as some popular doctrines called by that name.

3.6.1. Recanati-Kölbellian Relativism

Let’s start with an easy case. Recanati uses ‘relativism’ to refer to “the view that propositions can/should be relativized to indices other than/richer than possible worlds.”32 Others have offered similar characterizations; to take one example, Max Köbel states that relativism is “the claim that sentences of some category express propositions the truth of which is relative to a parameter over and above the standard world parameter.”33 Any view that posits a circumstantial parameter in addition to the circumstantial world parameter is thereby a relativistic view in this sense. Given its positing of a circumstantial scheme parameter, then, the deep view is clearly a relativistic view in the Recanati-Kölbellian sense. For that matter, so is temporalism. This, however, raises no special worries.

32 Recanati 2007, p. 36, fn. 3. It is clear from context that Recanati does not mean that all propositions are relativized in this sense.
33 Köbel 2009, pp. 375-376.
3.6.2. *Cappelen-Hawthornian Relativism*

Herman Cappelen and John Hawthorne use ‘relativism’ in a more nuanced fashion, taking a view to be relativistic if it takes as fundamental a relational truth property, such as *is true at*, where the left *relatum* is a proposition and the right is some circumstance of evaluation.\(^{34}\) Such views might still posit a nonfundamental monadic truth property, such as the property *is true simpliciter*, but go on to claim that any given proposition instantiates the nonfundamental, monadic property only in virtue of standing in the fundamental relation to some privileged circumstance. If our circumstances contain only world parameters, it is natural to say that a proposition is true *simpliciter* iff it is true at the actual world, where the right-hand side of the biconditional is more fundamental than the left. A view can *avoid* being relativistic, not necessarily by denying that there are any relational truth properties, but simply by reversing the fundamentality claim. The non-relativist can say that the monadic property is more fundamental than the relational property and that the left-hand side of our biconditional is more fundamental than the right.

Is the deep view a relativistic view in the Cappelen-Hawthornian sense? From the way I’ve spelled things out so far, the friend of the deep view is not forced to answer to this question either way. Nothing about the view commits us to saying that either the relational property or the monadic property is more fundamental, or whether we need to make use of the monadic property at all. However, if we do make use of the monadic property, we must say that there is an appropriately privileged circumstance. This privileged circumstance would simply be the circumstance that has as the values of its

\(^{34}\) Cappalen and Hawthorne 2009, Chapter 1.
parameters only the privileged values, such as the privileged time and world. So, the deep view is committed to there being a privileged circumstance only if it is committed to there being a privileged scheme.

Is there a scheme that stands out, amongst all schemes, just as the actual world stands out amongst all worlds or as the present stands out amongst all times? My initial reaction is that there is no such scheme—what would such a scheme be?—but I realize that this is no argument. In principle, we could work out versions of the deep view that do posit such a scheme and versions that do not. Whether or not the deep view counts as a relativistic view in the Cappelen-Hawthornian sense would thereby depend on which of these versions we choose to go with. There is no “in principle” answer—though, if my intuitions are correct and there is no privileged scheme, then there is no privileged circumstance and hence, no monadic truth property, making the deep view a Cappelen-Hawthornian relativistic view.

3.6.3. MacFarlanian Relativism

The third and final characterization of relativism that I’ll look at is the one offered by MacFarlane. As with Recanati-Kölbellian relativism, accepting MacFarlane relativism amounts to complicating a traditional semantic framework, though whereas Kölbel and Recanati take the requisite complication to be simply positing at least one non-worldly circumstantial parameter, MacFarlane’s characterization is far more radical.

On this type of relativism, when determining the truth value of a sentence $S$ in a

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35 See MacFarlane 2005, ms. It should be noted that MacFarlane’s discussion of relativism goes far beyond what I discuss here and that I will focus only on the bits directly relevant to the topic at hand and the framework in which I have been working. Specifically, we’re looking here at what MacFarlane ms. calls truth-value relativism rather than content relativism (p. 102) and also at characterizations of relativism couched in Kaplanian, rather than Lewisian, terms.
context $C$, we are no longer interested merely in whether the proposition $p$ expressed by $S$ in $C$ is true at the circumstance $E$ of $C$. Instead, we are interested in whether $p$ is true at the circumstance of the contexts, where the relevant contexts are (i) the context of utterance $C$ in which the sentence expressing $p$ was uttered and (ii) the context of assessment $A$ from which $p$ is assessed. For the purposes of evaluating most propositions, $C$ and $A$ will be identical, but sometimes the truth value of a proposition depends on the value of a certain parameter of a context of assessment that is distinct from the value of the corresponding parameter of the context of utterance. Call such propositions assessment-sensitive.

For an assessment-sensitive proposition $p$, we determine the circumstance of the contexts by “extracting” all of the values of the parameters of the context of utterance that are relevant for determining the truth value of $p$, along with all of the values of the parameters of the context of assessment that $p$ is assessment-sensitive to. The circumstance of the contexts is the circumstance whose parameters have those values.

An example might help. MacFarlane discusses a relativism about aesthetic vocabulary according to which, for an utterance of a sentence that expresses

(P43) The Mona Lisa is beautiful.

the circumstance of the contexts is taken to be (at least) a world and aesthetic standards pair, where the value of the world parameter is taken from the context of utterance and the value of the aesthetic standards parameter is taken from the context of assessment.

“When we assess an assertion, made yesterday by Ted, that the Mona Lisa is beautiful, what matters for its truth is not Ted’s aesthetic standards but our own,” MacFarlane

\[\text{\footnotesize 36 I say “the circumstance of the context,” implying uniqueness. MacFarlane rejects this; see MacFarlane ms., pp. 96-97. I’ll ignore this complication, as nothing in what follows hangs on it.}\]
claims; so “we say that Ted has spoken truly if the Mona Lisa is beautiful by our standards.”

This characterization of relativism can be easily generalized to be a characterization of relativism about contents in general rather than just about propositions. All we need to do is make the more general claim that there are assessment-sensitive contents, i.e. contents whose extensions are assigned according to the circumstance of the relevant contexts. A proposition containing an assessment-sensitive property as a constituent would then itself count as assessment-sensitive.

As I have developed it throughout this discussion so far, the deep view is not a relativistic view in the MacFarlane sense. This is simply because it does not posit contexts of assessment, assessment-sensitivity, or related notions. But this is not to say that the deep view couldn’t—or shouldn’t—be understood within that expanded framework. The friend of the deep view who is open to relativism could easily model her account after the relativism about aesthetic vocabulary discussed above, taking circumstances to be \(n\)-tuples containing at least worlds and schemes such that the value of the world parameter is determined by the context of utterance and the value of the scheme parameter is determined by the context of assessment. Inconstant propositions are inconstant in virtue of containing as constituents assessment-sensitive properties.

The deep view can be cast as a relativistic view in this MacFarlanian sense, but should it be? While a relativistic version of the deep view is coherent, it should be adopted only if it turns out that doing so best accounts for the linguistic data. So, really, it all depends on whether the linguistic data support the claim that inconstant DRMAs are

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37 MacFarlane ms., pp. 101-102.
assessment-sensitive. Specifically, we should look at data pertaining to the retraction of inconstant DRMAs. If such data support a relativistic version of the deep view, the friend of the deep view should be a relativist; if not, not. Which way the data point is a matter I set aside for now and return to in the final section of Chapter 4. For the remainder of this chapter, I will only discuss the non-relativistic version of the view, but translations into the relativistic version should be easy enough.

3.7. Inconstancy and Metaphysics

So far, I have introduced the deep view, detailed its mechanics, offered some conceptual motivation for it, and defended it against some initial objections. In this section and the next, I aim to show some of the work the view can do for us, starting by showing how the deep view can help us shed new light on one particular topic—the problem of the statue and the clay—before moving on to some “big picture” issues.

3.7.1. Inconstancy and Colocation

Let’s return to the problem of the statue and the clay, this time in some more detail. Suppose that exactly occupying a spacetime region \( r \) is a lump of clay called ‘Lump’.\(^{39}\) Suppose further that also exactly occupying \( r \) is a statue called ‘Statue’. Since Lump exactly occupies \( r \) and Statue does too, we might be inclined to ask if Statue and Lump really just are the same object. Call those who say ‘yes’ \textit{monists}, and those who say ‘no’ \textit{pluralists}. The monist might cite any number of reasons in her favor; perhaps it is

\(^{38}\) In the context of the current discussion, this topic was first introduced in Chapter 2, Section 2.4.1.

\(^{39}\) Again, to say that an object \( o \) \textit{exactly occupies} a spacetime region \( r \) is to say that (i) every subregion of \( r \) is occupied by a part of \( o \), and (ii) every part of \( o \) occupies a subregion of \( r \). In other words, \( o \) \textit{exactly occupies} \( r \) \textit{iff} \( o \) “fills” \( r \), without “spilling over.”
counterintuitive, metaphysically weird, or just theoretically unnecessary to adopt a view according to which any region of spacetime could be exactly occupied by more than one object. The pluralist, on the other hand, is typically motivated by arguments along the following lines. Lump, being a lump, could survive being squished, but Statue, being a statue, couldn’t. So, the pluralist can offer the following argument:

\[(S45) \quad \text{Lump could survive being squished.}\]

\[(S46) \quad \text{It is not the case that Statue could survive being squished.}\]

\[\therefore (S86) \quad \text{Lump and Statue are distinct.}\]

The argument seems valid, so, according to their side of the story, the pluralists’ case has been made.

In Sections 2.4.1 and 2.4.2 of Chapter 2, we saw how friends of certain versions of the shallow view—namely, Noonan’s account of Abelardian predicates and counterpart theory, respectively—could respond to this puzzle in attempts to vindicate monism. Their general strategy is to claim that the contents of the predicates of (S45) and (S46) are distinct, since those predicates are scheme-indexical and the use of the names ‘Lump’ and ‘Statue’ bring distinct schemes into play. The deep view, however, allows us to say that the contents of both the subject terms and predicates remain stable throughout. Even though the proposition expressed by (S45) really is the contrary of the proposition expressed by (S46) and both premises are true,\(^{40}\) we find ourselves neither forced to conclude (S86) nor forced to accept a contradiction. On the deep view, then, monism runs into no problems with colocation and we aren’t forced to claim that the relevant predicates express different contents in different contexts.

\(^{40}\) Relative to the circumstances under which they are evaluated.
The story told by friends of the deep view goes like this. Let’s introduce the name ‘Thing’ to refer to the object referred to by both ‘Lump’ and ‘Statue’. When we evaluate the proposition expressed by (S45),

\[(P44) \text{ Thing could survive being squished.}\]

the use of the name ‘Lump’ makes operative a scheme $s$ according to which the lumpish properties of Thing are assigned more weight than its statueish properties, perhaps with the latter even being ignored. As a result, Thing is not taken to be in the extension of \textit{could survive being squished}. So, given M-P, Thing is not such that it could be in the extension of \textit{survives being squished}. Relative to circumstances with $s$ as the operative scheme, then, (P44) is true.\textsuperscript{41} Thus, (S45), as uttered in a context $c$ and evaluated relative to such a lumpish circumstance, is true in $c$.

When we evaluate the proposition expressed by (S46),

\[(P45) \text{ It is not the case that Thing could survive being squished.}\]

the use of the name ‘Statue’ makes operative a scheme $s^*$ according to which the statueish properties of Thing are assigned more weight than its lumpish properties, perhaps with the latter even being ignored. As a result, Thing is not taken to be in the extension of \textit{could survive being squished}. So, given M-P, Thing could be in the extension of \textit{survives being squished}. Relative to circumstances with $s^*$ as the operative scheme, then, (P45) is true. Thus, (S46), as uttered in a context $C$ and evaluated relative to such a statueish circumstance, is true in $C$.

The truth of (P44) and (P45), relative to their respective circumstances, however,\textsuperscript{41}

\[\text{Assuming that values of the other parameters line up right, as well. For example, in order for (P42) to be true, Thing has to exist at the world of the circumstance. I ignore these complications here and assume that the other parameters have appropriate values.}\]
is compatible with the denial in either circumstance of the proposition expressed by (S86),

(P46) Thing and Thing are distinct.

After all, all we’ve seen is that different and incompatible propositions are true of Thing relative to different circumstances that differ with respect to scheme. This is not sufficient for showing that Thing is not identical with itself.

For illustration, consider a parallel argument:

(S87) Dwight is sitting.

(S88) It is not the case that Dwight is sitting.
\[\therefore (S89) \text{ Dwight and Dwight are distinct.}\]

The temporalist will argue that (S87) and (S88) can both express propositions true at their respective times of evaluation while still denying (S89), as long as those times are themselves distinct. Likewise, the friend of the deep view can argue that (S45) and (S46) can both express propositions true relative to their respective schemes of evaluation while still denying (S86), as long as those schemes are themselves distinct. If the use of names such as ‘Lump’ and ‘Statue’\(^{42}\) makes operative distinct schemes, then the schemes of evaluation for (S45) and (S46) will be distinct, so the friend of the deep view can deny (S86) and hold on to monism. We thereby have a solution to our puzzle of colocation, and on that solution, we can grant that the subject terms and predicates of the purportedly problematic sentences denote the same object and property, respectively, throughout the argument. Thus, the deep view vindicates monism,\(^{43}\) and it does so in a way that does not

\(^{42}\) Or even less suggestive names, as long as they have the right kind of history. See Kaplan 1989, p. 599.

\(^{43}\) It should be pointed out, however, that the deep view is also compatible with the denial of monism. The claim being made here is just that, by adopting the deep view, the monist gets herself out of trouble.
require us to posit a multitude of properties that can be expressed by the same predicate in different contexts.

Kit Fine has advanced versions of the pluralists’ arguments that rely, not on modal properties, but on *evaluative* properties.⁴⁴ Consider, for example, the following argument:

(S90) Statue is valuable.

(S91) It is not the case that Lump is valuable.

∴ (S86) Lump and Statue are distinct.

Unlike Lump, a mere lump of clay, Statue is worth a pretty penny. Thus, it looks like the pluralists’ case can be made without even so much as a mention of modal properties, so the solution offered by the deep view is of no use.

We might ask *why* Lump is worth little and Statue is worth much. Part of our answer should be that Lump is a lump and Statue is a statue—they fall under different *sortal* properties. Lynne Rudder Baker has suggested that an object’s sortal properties are had in virtue of its modal properties,⁴⁵ to which Karen Bennett responds by pointing out that Lump and Statue have the same modal properties.⁴⁶ If they have the same modal properties and sortal properties are had in virtue of modal properties, how could Lump and Statue differ in sortal properties and, thus, in evaluative properties?

The friend of the deep view can respond by pointing out that which modal properties an object instantiates will change with circumstance. It is open to her to say that, in lumpish circumstances, Thing instantiates those modal properties (such as *could survive being squished*) required for it to instantiate the sortal property *being a lump*. In

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⁴⁴ See Fine 2003.
⁴⁶ Bennett 2003, pp. 342-343.
statuish circumstances, Thing instantiates those modal properties (such as couldn’t survive being squished) required for it to instantiate the sortal property being a statue. If evaluative properties are had in virtue of sortal properties, sortal properties are had in virtue of modal properties, and modal properties can change with circumstance, then, contra Fine’s worries, evaluative properties can change with circumstance, as well.\textsuperscript{47}

It’s worth taking a moment to focus specifically on

\begin{equation}
\text{(S86) Lump and Statue are distinct.}
\end{equation}

Remember that use of the name ‘Lump’ makes operative a lumpish scheme in which Thing is in the extension of could survive being squished and that the use of the name ‘Statue’ makes operative a statueish scheme in which Thing is not in the extension of could survive being squished. What, then, are we to make of (S86)? Both names are used, so which is the operative scheme?

The answer, I think, is both of them. There are good reasons for thinking that we need to posit intra-sentential context shifting,\textsuperscript{48} and we can make use of such a notion here. The use of the name ‘Lump’ puts us in a lumpish context—and hence a lumpish circumstance when assigning content to ‘Lump’. Likewise, the use of the name ‘Statue’ puts us in a statueish context—and hence a statueish circumstance when assigning an extension to ‘Statue’. But this answer is immediately problemantic, since it now turns out that we are saying that an object that could survive being squished is distinct from an

\textsuperscript{47} We might ask which sortal properties can vary with circumstance—all of them, or just some of them? It might not be too problematic to take being a statue or being a lump to be circumstantial in this way (especially since talking about the object qua statue or qua lump will change the circumstance and cause the relevant sortal property to be instantiated), but what about sortal properties such as, say, being an electron? These are hard questions, and will depend on which modal properties really do end up being genuinely essential—that is, not scheme-circumstantial. Pursuing this issue here is beyond the scope of the present discussion, but I hope to say more about it in future work.

\textsuperscript{48} If only to make sense of multiple occurrences of the same demonstratives in the same sentence. See Braun 1996 for a nice discussion.
object that couldn’t. But, by Leibniz’s Law and contra monism, this is of course true! If context—and hence, circumstance—can shift intra-sententially and the inconstant properties an object has can thereby shift within the same sentence, how are we to make sense of identity statements?

The answer, I think, lies in more properly stating Leibniz’s Law, which can be done as follows:

**Circumstantial Leibniz’s Law:** An object \( o \) an object \( o^* \) are distinct if there is any circumstance \( E \) relative to which there is any property \( \Phi \) such that \( o \) is in the extension of \( \Phi \) and \( o^* \) is not.

When evaluating (S86), we are looking at Thing from two different circumstances, and the difference in properties that results is not sufficient for a violating of Circumstantial Leibniz’s Law. In order for Statue to be distinct from Lump, it would have to be the case that Statue and Lump are in the extension of different properties relative to the same circumstance; we have not seen that yet, so the deep view and its vindication of monism are in the clear.

3.7.2. Inconstancy and Essence

In this section, I gesture at a more general metaphysical—and metametaphysical—picture the friend of the deep view is able to avail herself of. I do not take anything I say here to constitute anything beyond a brief sketch of a view, and I do not take it to be my goal to have anything more robust to say. My aim throughout this discussion has been to introduce, motivate, and defend the deep view; at the present moment, I am merely attempting to gesture at a picture it might offer us. More work will obviously need to be done to bring this picture further into focus, but it is perhaps nice to know what some of
our options might be.

In Section 1.4.3 of Chapter 1, I discussed the Essence Test, according to which a DRMA is constant if it attributes to an object a property had by that object essentially or says of an object that essentially lacks a property that it does lack that property. Early on, however, I motivated the claim that sentences such as

(S15) Dwight Schrute III is essentially the son of Dwight Schrute, Jr.

are inconstant, even if contexts in which we would vary from normal assessment are few and far between. Following Kripke, though, it is not uncommon to take origins to be essential; if so, then Dwight instantiates the property is the son of Dwight Schrute, Jr. essentially if he instantiates it at all. Taken together, these claims are problematic: contra what was said earlier, if Dwight is essentially the son of Jr., then, given the Essence Test, (S15) is not inconstant.

Perhaps what’s going on is the following. As I’ve characterized them, schemes are entities that encode information about which properties we take an object to instantiate (or not) essentially or accidentally. So, as schemes shift, which properties we take to be essential or accidental will shift, as well. In some schemes, Dwight is essentially the son of Dwight Schrute, Jr.; in others, he’s not. The essentiality of Dwight’s origin, then, is dependent upon our conversational interests and goals; essentiality becomes a contextual matter.

Madness? Maybe. After all, if we know anything about essence, we know that it’s not a contextual matter. It has to do with objects and what they are, and not at all with what we happen to be interested in. Dwight is either essentially the son of Jr. or he’s not; what we’re willing to hold fixed or ignore is irrelevant.
But then again, maybe not. We can try to make sense of this contextual understanding of essence in two ways, one of which is perhaps more plausible than the other. Let’s start with the less plausible option first: an object’s essence—what it is at its very core—really is determined in part by our interests. For a given object, what it is to be that object can vary alongside shifts in scheme. I take it, however, that merely stating this option completes a reductio on it—whatever it is that we’re talking about at that point, it’s not essences. But perhaps the view is best understood as giving up on essence entirely and replacing it with a new notion. If this is the case, though, we need to be up front about it: we’ve straightforwardly replaced essences with schmessences. We also need to acknowledge that, if these schmessences aren’t really essences in the traditional sense, then for any given object, there is no scheme-independent fact of the matter about what it is to be that object. The resulting picture is, to put it mildly, bizarre—bizarre enough, I take it, that, now that we have examined it, we can push it to the side.

The second option is hopefully more plausible: we could instead introduce a bifurcated notion of essence. On the one hand, an object has a real essence, which is the set of properties that object instantiates essentially in all schemes in which it exists. A property $\Phi$ is really essential to an object $o$ just in case, no matter which scheme is operative, if $o$ didn’t instantiate $\Phi$, $o$ would not exist. Thus, what I am calling real essences are what metaphysicians might normally be inclined to just call essences. The Essence Test, then, should be thought of in terms of real essences.

Real essences are to be contracted with relative essences, where an object’s

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49 This is not unprecedented: see Lewis’s discussion of (what he there calls) real, nominal, and intermediate essences in Lewis 1971.

50 The notion of essence I’m working with here is basically that of Fine 1994.
relative essence in a scheme $s$ is the set of properties that object instantiates essentially-in-$s$. Say that an object $o$ instantiates a property $\Phi$ essentially-in-$s$ just in case, given $o$’s real essence and the features of $s$, we would not be able to consistently entertain $o$’s lacking $\Phi$ in $s$. Each object will have a relative essence for each scheme; as the scheme shifts, so will the object’s salient relative essence. And given the way we’ve defined relative essences, it follows that each of any given object’s relative essences will include that object’s real essence.

On this way of doing things, relative essences are essences only in name. Real essences get at what the object is at its very core, whereas relative essences throw on an additional layer, supplied by us. For each of an object’s properties (and for each property it lacks), that object’s real essence tells us which of those properties are instantiated (or not) really essentially; any claim about an “essential” property that is not part of the real essence is made true or false in part because of what we’re holding fixed, taking to be salient, ignoring, etc. Thus, the truth values of the propositions expressed by sentences constituting a large chunk of discourse about de re modality end up being determined in part by our interests. A large chunk of the truths of de re modality, then, ends up being determined—consciously or not—by us.

Our normal essence talk is thereby equivocal: sometimes we really talk about real essences, but sometimes we’re merely talking about relative essences. If we take a property to be essential to an object, how can we tell if that property is really essential or only relatively essential to it? Perhaps we can use something like Joseph Almog’s coherent subtraction test: if we can coherently imagine a scenario in which an object $o$

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51 See Almog 1991.
lacks a property $\Phi$, without thereby “giving up” the object, then $\Phi$ is not essential to $o$.

Translating this into talk that takes into account our bifurcated notion of essence, we find ourselves with two tests:

**Real Coherent Subtraction Test:** If, without holding the operative scheme fixed, we can coherently imagine a scenario in which $o$ lacks $\Phi$, then we have good reason to assert that $\Phi$ is not really essential to $o$.

**Relative Coherent Subtraction Test:** If, holding the operative scheme $s$ fixed, we can coherently imagine a scenario in which $o$ lacks $\Phi$, then we have good reason to assert that $\Phi$ is not relatively essential to $o$ in $s$.

Given that they are based on imaginative procedures, these tests will not be fool-proof. This is why I have formulated things in terms of what we have good reason to assert rather than in terms of what is true. But I take it that, inasmuch as we trust our imaginative capacities, we can also trust these tests to the same extent, even if they are ultimately fallible.

Suppose we are in a context in which, given the operative scheme $s$, we are taking seriously talk about people seeds as potential sources of human life. Without shifting out of $s$, we can coherently imagine a scenario in which Dwight does not instantiate *is the son of Dwight Schrute, Jr.*—he might have come from one of the seeds, after all. Thus, by the Relative Coherent Subtraction Test, we have good reason to assert that Dwight is not relatively essentially the son of Jr. in $s$. But suppose we are in a different context in which, given the operative scheme $s^*$, we are taking seriously Kripke’s talk of the essentiality of the parent-child relation. We cannot coherently imagine, without shifting out of $s^*$, a scenario in which Dwight does not instantiate *is the son of Dwight Schrute, Jr.* Thus, by the Relative Coherent Subtraction Test, we have good reason to assert that Dwight is relatively essentially the son of Jr. in $s^*$. 

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Now consider the Real Coherent Subtraction Test. Since, given what was said just now, we can find a scheme in which we can coherently imagine a scenario in which Dwight is not relatively essentially the son of Jr., the Real Coherent Subtraction Test tells us that we have good reason to assert that Dwight is not really essentially the son of Jr. So, when we say just that Dwight is essentially the son of Jr., without any further specification, we’re sometimes right and sometimes wrong. If by “essentially” we mean really essentially, we’re always wrong; if by “essentially” we mean relatively essentially, we’re right or wrong depending on the operative scheme. Ultimately, there is no scheme-independent fact of the matter about whether Dwight is relatively essentially the son of Jr.

Like many things, though, Dwight is an entity. It does not seem that we can coherently imagine any scenario, no matter which scheme is operative, in which he exists and is not an entity. So, by the Real Coherent Subtraction Test, Dwight is really essentially an entity, and by the Relative Coherent Subtraction Test, he is relatively essentially an entity in all schemes. It is perhaps difficult, however, to think of many other properties—if any—that Dwight instantiates really essentially rather than just relatively essentially to some scheme or another. If this is the case, then real essences will be quite thin—perhaps thin enough that it turns out that each object has the same real essence. This forces us to confront two immediate problems: (i) if essences are supposed to do the work of individuating objects, real essences might be too thin to inadequately do the job; and (ii) if all objects end up having the same real essence, it is not at all clear how they differ in their relative essences, since one would imagine that relative essences would depend on real essences. These are hard problems.

Regarding (i), we could say that objects are brutally individuated: there are no non-
trivial, finitely stateable individuation criteria. Objects $o$ and $o^*$ are distinct, not because they differ with respect to essence, but simply because they are. Another option would be to posit haecceities or thisness properties, i.e. properties such as an object $o$’s property of being identical with $o$ and an object $o^*$’s property of being identical with $o^*$.\textsuperscript{52} If, as is plausible, such properties are had essentially by the objects that instantiate them, that will provide enough differences among real essences to allow them to do their individuating work. As someone comfortable with such properties, I am amenable to this solution, though I wholeheartedly recognize that this sentiment is not universal.

Regarding (ii), we could deny any robust connection between real and relative essences beyond the simple claim made earlier that any property that is really essential to an object will also be relatively essential to it in all schemes. What, then, determines an objects relative essences? Two factors: (a) which properties it instantiates (or not, really essentially or not really essentially) and (b) convention, based on our interests and how we tend to treat objects with certain properties. An object’s properties—even those it has accidentally—put limits on what we might want to say about its relative essences, but aside from respecting those limits, the rest is up to us. This is not to say that we ever made a conscious decision about such matters—there has probably never been a Relative Essence Committee, after all—but instead they are the results of habits we have, for whatever reason, fallen into.

Here’s an example. Dwight is not really essentially human, but he is human. For whatever reason, it’s turned out that, in most schemes, we take it that, if something is human, it is essentially human. In those schemes, Dwight is relatively essentially human.

\textsuperscript{52} For discussion, see Adams 1979.
Thus, Dwight’s relative essences are determined by his real essence in conjunction with
the conventions we adopt in a scheme. Much of our talk about how Dwight could or must
be, then, is, at least in part, conventional—as is the truth of the content of that talk.

So far, we’ve seen that this picture of bifurcated essences gets us a metaphysical
picture (albeit a perhaps radical one), but it also gets us a metametaphysical picture.
Consider again the question of whether Dwight is essentially the son of Jr. This is a
question about an object, a property, and the relation between that object and property; it
is a straightforwardly first-order metaphysical question. But I take it that the further
question of how we should answer that first-order question is a second-order
metaphysical question—that is, a metametaphysical question. What the bifurcated
essence view allows us to say is that the answer to the first-order question of whether an
object has its origin essentially is one that cannot be determined outside of a context. The
metametaphysical import of the view, then, is that certain questions of first-order
metaphysics end up being answerable only with respect to a context—more specifically,
to a scheme, and thereby, to our conversational goals and interests. Such questions do
have answers relative to a scheme, but as our interests change, so can those answers.
Certain issues of first-order metaphysics, then, end up being sensitive to our interests.
Whether this counts as a deflation of certain issues of first-order metaphysics or as an
inflation of the metaphysical relevance of our interests is a matter I will not pursue here.53

This metaphysical and metametaphysical picture is one that the deep view might
make available, but, to be clear, I do not take it to be the case that the friend of the deep
view is committed to it. As Almog laments,

53 Though I lean more toward the former.
Alas, sometimes greed gets the better of us and our subtraction experiments violate the very presuppositions that make them possible. Attend again to the Nanga Prabat. Whatever liberties we are about to allow ourselves, if that worldly peak itself is to be the subject of our subtraction experiment, we must not tinker with its being a mountain. But then what of one who claims that ‘being a mountain’ is subtractible, too, offering as his “proof” the coherence of a supposition, a “short story” if you will, in which N.P. itself bears proudly the predicate ‘not a mountain’?

The predicating hand destroys what the one handling the subject took so much care to protect. It is shamelessly supposed of our subject, a mountain if nothing else, that it is not one. Inevitably, the suspicion grows that our subject is not Nanga Prabat but merely an “arbitrary” entity, with no identity, a close kin to the philosopher’s mysterious “bare particular.” And so, with our most fundamental presupposition violated, the aboutness of the subtraction experiment slips away. Gone is the sense that it is still about the real Nanga Prabat, not an invented philosophical fiction, that we suppose.54

Perhaps Almog is right: maybe the story that we told to motivate the rejection of the claim that

\[(S15) \text{ Dwight Schrute III is essentially the son of Dwight Schrute, Jr.}\]

really is incoherent, and our desire to take with a sense of charity the fact that, in some contexts, we might deny (S15) is simply going too far. Dwight really is essentially—really essentially—the son of Jr. and, by the Essence Test, DRMAs pertaining to Dwight’s origin aren’t really inconstant at all. When we deny (S15), we’re just wrong.

Recall the methodological claims made in Section 1.4 of Chapter 1, according to which we should try to make true as many sentences as possible that competent speakers take to be true, no matter how obscure the context. We can perhaps hold onto this methodology while rejecting the claim that DRMAs such as (S15) are inconstant; after all, our aim is to make true as many sentences as possible, and if it just isn’t possible to do so given genuine considerations of essence, this is no violation of our methods. It also

isn’t to attribute massive error. Instead, we attribute error only when speakers get matters of essence incorrect—and, given the amount of metaphysical training the average speaker has had, not to mention the reliability of metaphysical intuitions had even by metaphysicians themselves, these errors are perhaps understandable.

There is a debate to be had by the friends of bifurcated essences and the Almogians, but this is a debate to be had after we’ve accepted the deep view. In the next chapter, I argue that we should.
Chapter 4: Inconstancy and Content

4.1. Introduction

With the deep view and the best version of the shallow view—what I have called the Direct Approach—both out on the table, I now move on to considerations of some relevant linguistic data in an effort to decide which of these two views offers a better account of the inconstancy of DRMAs. In this chapter, after explicating some central notions, I consider two sets of data that I interpret as favoring the deep view. Afterwards, I shift focus to a test that will adjudicate between MacFarlane's relativistic and non-relativistic versions of the deep view. I conclude by offering a recap of the cumulative case in favor of the deep view over the shallow view made throughout these first four chapters, as well as reasons to accept the deep view over the mixed view.

4.2. Shared Content and Stable Content

Say that sentences $S$ and $S^*$ as uttered in contexts $C$ and $C^*$, respectively, share content with respect to $C$ and $C^*$ iff there is a proposition $p$ such that $S$ as uttered in $C$ and $S^*$ as uttered in $C^*$ both express $p$. A special instance of such shared content is when $S = S^*$, where we see the same sentence expressing the same proposition across (at least some) contexts. When $S$ and $S^*$ share content across $C$ and $C^*$, and $S = S^*$, say that $S$ has stable content across $C$ and $C^*$.

Consider a DRMA $S$ that is true when uttered in $C$ and false when uttered in $C^*$,
with the only relevant difference between \( C \) and \( C^* \) being a difference in the schemes operative in the contexts. The deep view predict that \( S \) will have stable content across \( C \) and \( C^* \), whereas the shallow view predicts that it will not. The data discussed in this chapter provide some confirmation of the predictions of the deep view over those of the shallow view. Thus, we have some evidence in favor of the former over the latter. It must be emphasized that, following recent discussion by Brian Weatherson and Herman Cappelen and John Hawthorne, I take this evidence to amount to inductive support for the deep view over the shallow view, not as part of a deductive argument for the former or against the latter.\(^1\) If the evidence is good, we have seen one part of a cumulative case for the rejection of the shallow view and the acceptance of the deep view.

4.3. Agreement

Our first set of tests involves agreement reports. Before digging in, it is important to distinguish between two types of agreement. Cappelen and Hawthorne say

> The verb ‘agree’ has a use according to which it picks out a state of some plurality of individuals—where some individuals agree that \( P \) if they all believe the proposition that \( P \). There is also a different use according to which it denotes an activity, where agreeing that \( P \) is the endpoint of a debate, argument, discussion, or negotiation. On this use, ‘agreeing that \( P \)’ marks an event. … The former use is perfectly applicable to interaction free pairs of individuals so long as there is some view about the world that they share.\(^2\)

Let’s focus on the state sense of agreement rather than the activity sense. The requirements for state-sense agreement are rather minimal; it is not necessary that the agreement be made known or that the agents have ever even met. Some agents might

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1. See Weatherson 2011 and Cappelen and Hawthorne 2011, pp. 143-150.
2. Cappelen and Hawthorne 2009, p. 60.
agree in the state sense even if there is no time at which they all exist or even if they inhabit different worlds.

With that said, on to the tests:3

**Agree-1:** Let $S$ be a sentence uttered, in an obviously sincere fashion, by an agent $a$ in a context $C$, and $S^*$ be a sentence uttered, in an obviously sincere fashion, by an agent $b$ in a context $C^*$. If, from a third context $C^{**}$, a report of ‘$a$ and $b$ agree that $S$’ feels inaccurate, then we have evidence that $S$ does not have stable content across $C$ and $C^*$.

**Agree-2:** Let $S$ be a sentence uttered, in an obviously sincere fashion, by an agent $a$ in a context $C$, and $S^*$ be a sentence uttered, in an obviously sincere fashion, by an agent $b$ in a context $C^*$. If, from a third context $C^{**}$, a report of ‘$a$ and $b$ agree that $S$’ feels accurate, then we have evidence that $S$ has stable content across $C$ and $C^*$.

The utterances must be *sincere* to establish that the agents believe the content of the sentences they are uttering, and they must be *obviously* sincere to establish that this is common knowledge to all relevant agents involved in or overhearing the conversation. Other things being equal, the strength of the evidence gleaned is proportional to the strength of the feelings of inaccuracy, in the case of Agree-1, or accuracy, in the case of Agree-2. Obvious cases of agreement thereby constitute strong evidence of stable content—again, other things being equal—whereas merely questionable cases constitute merely questionable evidence.

Why two tests? There is difference between a report feeling *accurate* and that report *not feeling inaccurate*, just as there is a difference between a report *not feeling accurate* and that report feeling *inaccurate*. After all, a report might feel neither accurate nor inaccurate. By teasing apart tests that correlate feelings of accuracy with evidence for

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3 These tests are variants of the first two agreement-based tests found on Cappelen and Hawthorne 2009, p. 54. Cappelen and Hawthorne also discuss two other tests—Says-That and Collective Says-That—but since I find the objections they raise against these tests to be powerful, I forgo discussion of them here. MacFarlane (2011, pp. 447-448) agrees regarding at least Says-That, though it seems that his comments extend to Collective Says-That, as well.
stable content from tests that correlate feelings of inaccuracy with evidence against stable content, we are able to be clear on the presence of evidence, whether positive or negative, versus a lack of evidence. Additionally, teasing apart the tests gives us the added benefit of being able to better tackle cases in which there is some indecision about whether a given report feels accurate, inaccurate, or somewhere in between, whether that indecision be on the part of an individual speaker or a group of speakers. This allows us to get a better grip on—and hence, better interpret—potentially messy data.

Let’s look at some test cases. Suppose that there are contexts $C$ and $C^*$ that differ only insofar as the agent and location of $C$ are Karen and Utica, New York, respectively, and the agent and location of $C^*$ are Holly and Nashua, New Hampshire, respectively. In $C$, Karen utters

(S92) Obama won the 2008 Presidential election.

Meanwhile, in $C^*$, Holly also utters (S92). Now suppose that you and I are in context $C^{**}$ that differs from $C$ and $C^*$ only insofar as the agent and location of $C^{**}$ are me and Scranton, Pennsylvania, respectively. I report to you

(S93) Karen and Holly agree that Obama won the 2008 Presidential election.

(S93) feels accurate, so by Agree-2, we have evidence that (S92) has stable content across those contexts, despite the difference in agent and location.

But now suppose that, in $C$, Karen utters

(S94) It’s raining.

Meanwhile, in $C^*$, Holly also utters (S94). To simplify, let’s stipulate that Karen and Holly are not talking to each other (over the telephone, on Skype, etc.). Suppose that you and I are in $C^{**}$ and I report to you
(S95) Karen and Holly agree that it’s raining.

(S95) feels inaccurate, so, by Agree-1, we have evidence that (S94) lacks stable content across \( C \) and \( C^* \). Since the only differences between \( C \) and \( C^* \) are their respective agents and locations, the best explanation for a change in content across contexts would be that (S94) is agent- or location-indexical, with location being the more plausible culprit.

Now that we’ve seen both Agree-1 and Agree-2 at work, let’s get back to inconstancy. Suppose that Jim is on one side of the office and is involved in a conversation about his coworker, Dwight. The conversation is such that Dwight’s job performance—as it appears on paper—is much more relevant to the participants’ interests than various facts about his personality. It is acknowledged that his numbers are intimidating and that his work is, not just efficient, but standard-setting. Facts about his dismal personality are simply ignored. With this known to all participants, Jim utters (in an obviously sincere fashion; I henceforth omit this qualification)

(S14) Dwight could receive a promotion.

Jim and his interlocutors take (S14) to be true. After all, such accomplishments are looked upon favorably by Corporate, and everyone knows this.

On the other side of the office, Pam is involved in a distinct conversation, also about Dwight, in which various facts about Dwight’s personality are comparatively much more relevant to the interests of the participants than are recorded facts about his job performance. It is acknowledged that Dwight is, not only a dismal and transparent sycophant, but also a bumbling ignoramus whose numbers come out so impressive as a result of nothing more than sheer luck (or perhaps the will of some malevolent designer). Feeling contrary, defiant, or perhaps confused, Pam utters (S14). Not surprisingly, her
interlocutors take her to have said something false. After all, such traits are highly frowned upon by Corporate, and everyone knows this.

Michael, deeply interested in everyone’s business, overhears Jim and Pam’s utterances. Reporting on what he’s overheard, he utters

(S96) Jim and Pam agree that Dwight could receive a promotion.

If (S96) feels accurate, then, by Agree-2, we have evidence that (S14) has stable content across those contexts. And it does seem that (S96) feels accurate, so we find ourselves with evidence that (S14) has stable content across those contexts, despite the difference in agent and interests.

4.3.1. Agreement Over What?

One might object to the use of the above tests on the grounds that we are merely assuming that the objects of agreement are always propositions, rather than, say, sentences or utterances. After all, merely defining a sense of ‘agree’ in terms of propositions in not enough to establish that we can infer anything at all about content from agreement reports, even accurate ones.4

Granted. But, while this worry is well placed, we can overcome it by forcing a reading of ‘agree’ such that the objects of agreement are propositions. We do so by forming a conjunction, with our original agreement report as the first conjunct and with a propositional attitude report containing anaphoric reference to the object of that agreement as the second.5 For example, suppose that Creed had been present and nodding

4 Thanks to Craige Roberts, Dawn Starr, and William Taschek for each independently pushing me on this point.
5 I owe this strategy to Ben Caplan.
along with Jim, and that instead of (S96), suppose that Michael had uttered

(S97) Jim and Pam agree that Dwight could receive a promotion, and Creed
believes it, too.

Given that Jim’s utterance was obviously sincere and Creed’s actions indicate the he’s on
board, if (S96) feels accurate, (S97) should as well. The objects of belief are propositions,
so the ‘it’ that Creed believes—where the ‘it’ anaphorically refers to the object of Jim and
Pam’s agreement—must be a proposition as well. Thus, even if agreement reports can be
made with senses of ‘agree’ such that the objects of agreement are sometimes sentences
or utterances, we can force the propositional reading. Since this strategy is readily
available, I will not include the relevant kind of second conjunct in subsequent examples
of agreement reports, though they could easily be added to guarantee what we need.

4.3.2. Circumstance

I said earlier that it does seem that (S96) feels accurate, but at this point in the discussion,
I am hesitant to go ahead and assert that it really is. This is because, on the face of it, such
an assertion appears to leave us with some uncomfortable consequences. Recall that what
Jim said was taken to be true and that what Pam said was taken to be false, and suppose
that their interlocutors are correct in their assessments.6 If (S96) is accurate, then Jim and
Pam agree despite the fact that only one of them speaks truly. As such, we appear to be
forced to reject the following inference:

(S98) Jim has a true belief that p.

(S99) Pam agrees with Jim that p.

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6 As per the methodology discussed in Chapter 1, Section 1.4.
∴ (S100) Pam has a true belief that p.

This inference, however, seems valid. It would be very odd, after all, to report that Jim and Pam agree that Dwight could receive a promotion but that Jim is right and Pam is wrong. So, if we take (S96) to be accurate, it looks, at least on the face of it, like we have to give up on the preservation of the truth of beliefs across agreements.

The trouble here, I think, comes from forgetting about the role of *circumstance*. Whereas a context can be thought of as a function from expressions to contents (in this case, from sentences to propositions), circumstances can be thought of as functions from contents to extensions (in this case, from propositions to truth values).7 Keeping circumstance in mind, suppose that we recast the inference as follows:

(S101) Relative to circumstance E, Jim’s belief that p is true.

(S99) Pam agrees with Jim that p.

∴ (S102) Relative to circumstance E*, Pam’s belief that p is true.

This inference is *not* valid. Jim and Pam agree that Dwight could receive a promotion if their beliefs share content, i.e. if they both believe that Dwight could receive a promotion. Relative to the circumstance of the context of Jim’s utterance (which we can call *Jim’s circumstance*), Jim’s belief that Dwight could receive a promotion is true. Does it follow that, relative to the circumstance of the context of Pam’s utterance (which we can call *Pam’s circumstance*), Pam’s belief that Dwight could receive a promotion is true? No. What follows is that Pam’s belief is true *relative to Jim’s circumstance*, and that Jim’s belief is false *relative to Pam’s circumstance*. Nothing about the agreement or the truth of the belief relative to Jim’s circumstance forces us to draw any conclusions about the truth

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7 See Chapter 1, Sections 1.5.2 and 1.5.8.
of the belief relative to Pam’s circumstance. So, (S100) follows from (S98) and (S99) as long as Jim and Pam’s beliefs are evaluated relative to the same circumstance, which is the same as saying that (S102) follows from (S101) and (S99) only when $E = E^*$. This is how it should be.

4.3.3. Changes in Belief

Here’s another potential complication. Consider a situation in which, on Monday, Jim utters

(S103) Dwight is sitting next to Phyllis.

On Wednesday, Pam also utters (S103). On Friday, Michael reports

(S104) Jim and Pam agree that Dwight is sitting next to Phyllis.

With just the information we have been given so far, it is hard to say whether (S104) is accurate—I take it that it is only if Jim and Pam still believe on Friday that Dwight is sitting next to Phyllis. If either of them changed their belief in the interim, Michael’s report is inaccurate. If, on Monday, Jim believed that Dwight was sitting next to Phyllis, and, on Wednesday, Pam believed the same thing, and that’s all the information we have, we cannot conclude anything about their state of agreement on Friday about Dwight’s whereabouts. After all, come Friday, they might very well disagree about the matter.

I said earlier, following Cappelen and Hawthorne, that two individuals can agree in the state sense even if there is no time at which both individuals exist. It would be helpful now to further refine our notion of agreement in the state sense. If I were to report today

(S105) The ancient Greeks agree with the ancient Indians that circles are round.

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(S106) Pythagoras agreed with Gödel that numbers are neat.

my report is accurate even though none of those parties are alive and holding such a belief at the time of my utterance. But notice that (S105) and (S106) report on what the respective parties habitually believed: the ancient Greeks and the ancient Indians both believed in general that circles are round, and Pythagoras and Gödel both believed in general that numbers are neat. When agents agree in this way, say that they agree in the habitual state sense, which does not require that those agents agree at any specific time.

In reporting (S104), it is clear that Michael does not mean to say that Jim and Pam agree about Dwight’s whereabouts in the habitual state sense. Instead, they agree in what we can call the transient state sense, which is to say that they agree at some specific time. Reports of agreement in the transient state sense are accurate only if the agents said to be agreeing agree at the time of the utterance of the report. This is why it is hard to say whether (S104) is accurate with only the information made available earlier; in order to determine the accuracy of the report, we need to know, not what Jim and Pam believe in general, but what they believe at the time of the report. From here on out, we’ll focus just on that sort of agreement, leaving habitual state-sense agreement to the side.

Why might this be problematic? Just as agents change beliefs over time, so too might they change beliefs as schemes shift. With a performance-centered scheme operative, Jim believes that Dwight could receive a promotion, but he might revise that belief if he switches to a personality-centered scheme. If it is inaccurate to report that some agents agree that \( p \) in the transient state sense merely because each of those agents

\[ \text{Or, if the agreement report is that they agreed or will agree at } t, \text{ only if the agents said to be agreeing agree at } t. \]
at some time believes, believed, or will believe \( p \), though not necessarily at the same time, is it also inaccurate to report that some agents agree that \( p \) in the transient state sense merely because each of those agents believes \( p \) when at least some schemes, though not necessarily the same schemes, are operative? If so, then our earlier

(S96) Jim and Pam agree that Dwight could receive a promotion.

is in the same boat as (S104), and, unless we can determine what Jim and Pam would believe with different schemes operative, Agree-1 and Agree-2 can offer no evidence either way.

So is the evidence here a wash? I don’t think so, because the answer to the question just raised is ‘no’. On the face of it, (S104) feels accurate. But we might worry that (S96) and (S104) should stand or fall together, and our judgments about (S96) are, with just the information we have here, shaky at best. But if, upon inquiring into why (S104) feels shaky, we determine that it is because it has some shaky-making feature, we should also check to see if (S96) has that same shaky-making feature. If not, then they don’t really stand or fall together, and (S96) is in the clear. And that’s exactly what’s going on here.

The agreement reports we’ve looked at have been present tense transient state-sense agreement reports: some agents agree at \( t \) that \( p \) if, at \( t \), they share the belief that \( p \). It should be no surprise, then, that there is a temporal element to the agreement report itself: the fact that we’re dealing with transient state-sense agreement demands it. But we have not yet seen a compelling reason to accept a corresponding interest-based element. There is an obvious element of uncertainty with (S104), since it is likely that, come Friday, Jim or Pam have revised their beliefs—this just comes with (S104) being a report
of transient state-sense agreement. But in the case of (S96), Michael’s report followed immediately after Jim and Pam made their utterances, with him having no reason to believe that either of them had changed their beliefs in such a short span of time. (S96) and (S104) are importantly different in this respect, and the important differences are the ones that lead to (S104) feeling shaky. I conclude, then, that, since it feels accurate on the face of it and lacks the feature that makes (S104) feel shaky, (S96) is an accurate report. So, by Agree-2, we have evidence that

(S14) Dwight could receive a promotion.

has stable content across Jim and Pam’s contexts, despite the difference in agents and schemes.

4.3.3. Weatherson’s Worries

Weatherson raises two worries for tests like those just presented. First, and specifically of Agreement tests, he says that he doesn’t “think the diagnostic is particularly plausible” because “sometimes we can report parties as agreeing even though they don’t agree on the truth value of any proposition.”9 Consider the following sentences:

(S107) Alec, Pierre and Franz agree that they were lucky to be born where they were actually born.

(S108) Alec, Pierre and Franz each consider each of Alec, Pierre and Franz lucky to be born where they were actually born.

(S109) Alec, Pierre and Franz each consider themselves lucky to be born where they were actually born.

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Regarding these sentences, Weatherson says

So while [(S107)] has a disambiguation where it is true only if something like [(S108)] is true, it also has a disambiguation where it is true as long as something like [(S109)] is true. … Given that sentences like [(S107)] could mean something like [(S109)], there is little reason to think that agreement diagnostics will provide us clear evidence of sameness of content.10

Weatherson is right to point out that, while (S108) involves Alec, Pierre, and Franz each believing the same proposition, (S109) involves them each believing a different proposition. So, if (S107) can be disambiguated as (S109) and seems like an accurate report, it looks like we have a clear counterexample to the reliability or our tests.

Weatherson thinks that (S107) feels accurate, but Cappelen and Hawthorne conclude otherwise.11 I am inclined to agree in part with Cappelen and Hawthorne; at least, I’m inclined to say that (S107) feels accurate only if it is clear that it should be disambiguated as (S108). If the situation suggests that (S107) should be disambiguated as (S109), (S107) sounds confusing at best and simply inaccurate at worst.

What should we make of this? Suppose that Weatherson is right; then, by Agree-2, we have evidence that the relevant beliefs held by Alec, Pierre, and Franz have stable content. Suppose that Cappelen and Hawthorne are right; then, by Agree-1, we have evidence that the relevant beliefs lack stable content. What happens if (S107), when disambiguated as (S109), is confusing, or when it’s not clear—either to an individual assessing the report or among the members of a group offering an assessment—whether it’s accurate or inaccurate? In such cases, we simply get little to no data at all. So, since I tend to share intuitions with Cappelen and Hawthorne here, I’m inclined to say that

10 Ibid.
11 See Cappelen and Hawthorne 2011, p. 144.
(S107), when disambiguated as (S109), either fails to deliver the punch that Weatherson wants it to or is too problematic to be of serious concern. The agreement reports looked at so far (and disagreement reports to come) are far simpler and don’t seem to generate similar problems, so we’re in good shape.

Weatherson raises a second, more general worry.

In any case, it is hard to see why we should expect there to be a diagnostic of the kind Cappelen and Hawthorne are aiming for. Such diagnostics are the exception, not the rule, in social sciences. There’s no simple diagnostic for whether a particular state is democratic or not. (Is modern-day Afghanistan a democracy? What about modern-day Alabama?) Nor is there a simple diagnostic for whether a particular rule is a law. (Are internal revenue regulations laws?) But political science and jurisprudence don’t collapse in the absence of such diagnostics. Nor should philosophical semantics collapse in the absence of a simple test for context-sensitivity.\(^\text{12}\)

I agree with Weatherson on a few points here. First, philosophical semantics probably wouldn’t collapse if there were no simple tests for context-sensitivity (or, as I am casting them here, tests for stable content). As such, we shouldn’t expect to find a diagnostic test just because we are capable of doing semantics; we could probably do semantics even if there were no such tests. But we shouldn’t conclude from this that there aren’t any such tests, or that it wouldn’t be helpful to look for them. Maybe, in principle, we can do semantics without such diagnostic tests, but if they might be found and using them would makes our job easier, what’s stopping us from looking for them?

Second, I agree the diagnostics tests we find, if useful, probably won’t be simple. I’m not sure what criteria for simplicity Weatherson has in mind here, but it seems to me that the Agreement tests here (and the Disagreement tests to come) are not all that simple. We have the complication of teasing Agree-1 apart from Agree-2, as well as the reliance

\(^{12}\) Weatherson 2011, p. 135.
on complicated semantic machinery such as contexts. Neither the tests nor their applications are all that simple, but they aren’t overly intractable, either. As Weatherson himself points out,

Indeed, the situation in political science and in jurisprudence is in one sense worse than it is in semantics. We can state, admittedly in theory-laden terms, what it is for the content of a sentence type to be context-invariant or context-sensitive. It is much harder to state, even in theory-laden terms, what it is for a state to be democratic, or for a rule to be a law.\(^{13}\)

In other words, diagnostic tests in semantics are probably more tractable than in the social sciences. In the end, then, I’m not sure what we should be worried about. Weatherson’s worries need not be our worries.

4.4. Disagreement

We can run similar tests based on (the transient state-sense of) disagreement, where two agents disagree at \(t\) about whether \(p\) just in case, at \(t\), one of them believes that \(p\) and the other believes that not-\(p\). The tests look like this:

**Disagree-1:** Let \(S\) be a sentence uttered, in an obviously sincere fashion, by an agent \(a\) in a context \(C\), and \(S^*\) be a sentence of the form not-\(S\) uttered, in an obviously sincere fashion, by an agent \(b\) in a context \(C^*\). If, from a third context \(C^{**}\), a report of ‘\(a\) and \(b\) disagree about whether \(S\)’ feels inaccurate, then we have evidence that \(S\) does not have stable content across \(C\) and \(C^*\).

**Disagree-2:** Let \(S\) be a sentence uttered, in an obviously sincere fashion, by an agent \(a\) in a context \(C\), and \(S^*\) be a sentence of the form not-\(S\) uttered, in an obviously sincere fashion, by an agent \(b\) in a context \(C^*\). If, from a third context \(C^{**}\), a report of ‘\(a\) and \(b\) disagree about whether \(S\)’ feels accurate, then we have evidence that \(S\) has stable content across \(C\) and \(C^*\).

As with the Agreement tests, the strength of the evidence gleaned from Disagree-1 and

\(^{13}\) *Ibid.*
Disagree-2, other things being equal, will be proportional to the strength of the feelings of inaccuracy and accuracy, respectively.

Here are some test cases. Suppose that there are contexts $C$ and $C^*$ that differ only insofar as the agent and location of $C$ are Karen and Utica, respectively, and the agent and location of $C^*$ are Holly and Nashua, respectively. In $C$, Karen utters

(S110) McCain would have made a great President.

Meanwhile, in $C^*$, Holly utters

(S111) McCain would have not made a great President.

Now suppose that you and I are in context $C^{**}$ that differs from $C$ and $C^*$ only insofar as the agent and location of $C^{**}$ are me and Scranton, respectively. I report to you

(S112) Karen and Holly disagree about whether McCain would have made a great President.

(S112) feels accurate, so by Disagree-2, we have evidence that (S104) has stable content across $C$ and $C^*$, despite the difference in agent and location.

But now suppose that, in $C$, Karen utters

(S94) It’s raining.

Meanwhile, in $C^*$, Holly utters

(S113) It’s not raining.

Again, let’s stipulate that Karen and Holly are not talking to one another. Suppose that you and I are in $C^{**}$, respectively. I report to you

(S114) Karen and Holly disagree about whether it’s raining.

(S114) feels inaccurate, so, by Disagree-1, we have evidence that (S94) lacks stable content across $C$ and $C^*$. As before, since the only differences between $C$ and $C^*$ are their
respective agents and locations, the best explanation for a change in content across contexts would be that (S94) is either agent- or location-indexical, with location being the more plausible culprit.

Now that we’ve seen both Disagree-1 and Disagree-2 at work, let’s again get back to inconstancy. Suppose that the situation is as before, except that, while Jim utters

(S14) Dwight could receive a promotion.

Pam—not feeling contrary, defiant, or confused—instead utters

(S115) Dwight could not receive a promotion.

Given the scheme operative in Pam’s context, she seems to have said something true. Michael reports

(S116) Jim and Pam disagree about whether Dwight could receive a promotion.

If (S116) feels accurate, then, by Disagree-2, we have evidence that (S14) lacks stable content across Jim and Pam’s contexts. And it does seem that (S116) feels accurate, so we find ourselves with evidence that (S14) has stable content across those contexts, despite the difference in agent and schemes.

4.4.1. Analogous Problems, Analogous Solutions

Various considerations analogous to those that arose in the discussion of the Agreement tests and data arise here, but I suppress discussion of them since they will be answered in pretty much the same manner. Accordingly, I’m comfortable in asserting that (S116) feels like an accurate report, so again we have evidence that (S14) has stable content across Jim and Pam’s contexts, despite the difference in agents and schemes.
4.4.2. Double-Dipping?

Are the Agreement and Disagreement tests really different enough to warrant counting them separately? To put the question another way, is it really honest to count both agreement data and disagreement data, or does counting one and then the other really just amount to double-dipping?

I think it is honest, and I don’t think we have a case of double-dipping. Agreement and disagreement are distinct phenomena, after all, not just two sides of the same coin.\textsuperscript{14} You and I agree that $p$ just in case we both believe that $p$, and we disagree about whether $p$ just in case one of us believes that $p$ and the other believes that not-$p$. In cases in which one of us remains neutral about $p$ (or not-$p$), it can’t be said that we either agree or disagree. So if the phenomena are genuinely distinct, different tests seem warranted.

Additionally, having tests for both agreement and disagreement helps in the same way as does teasing apart Agree-1 from Agree-2, on the one hand, and Disagree-1 from Disagree-2, on the other. Doing so gives us the added benefit of being able to better tackle cases in which there is some indecision about whether some agents agree or disagree, whether that indecision be on the part of an individual speaker or a group of speakers. Again, this allows us to get a better grip on—and hence, better interpret—potentially messy data.

4.5. The Deep View Vindicated

If the agreement and disagreement data discussed are reliable, then we have seen

\textsuperscript{14} As a precedent for taking agreement and disagreement data separately, see Cappelen and Hawthorne 2011, p. 114 and 2009, pp. 64-65.
evidence that

(S14) Dwight could receive a promotion.

does have stable content across Jim and Pam’s contexts. (S14) is a DRMA, and Jim and Pam’s contexts differ only with respect to agents and schemes. Thus, we have evidence that there is a DRMA that has stable content across contexts that differ only with respect to agents and schemes. If we have evidence that there is a DRMA that has stable content across contexts that differ only with respect to agents and schemes, then, trivially, we have evidence that there is a DRMA that that stable content across contexts that differ with respect to schemes. Insofar as the shallow view predict that no inconstant DRMAs will have stable content across contexts that differ with respect to scheme whereas the deep view predicts that at least some will, our findings here amount to evidence—and, if my intuitions are calibrated correctly, strong evidence—in favor of the deep view over the shallow view.

And thus the case for the deep view over even the best variety of shallow view—the Direct Approach—can be made. The relevant linguistic data indicate that there are at least some DRMAs that express inconstant, i.e. scheme-circumstantial, propositions. This result is, of course, compatible with the mixed view, as originally discussed in Chapter 1, Section 1.8. After all, if we return to our disjunctive characterization of inconstancy,

**INC:** A DRMA \( a \) is *inconstant* just in case (i) \( a \) is scheme-indexical and can expresses different scheme-noncircumstantial (constant) propositions in contexts that differ with respect to scheme, and some of those propositions differ in truth value, or (ii) \( a \) is scheme-nonindexical yet expresses a scheme-circumstantial proposition, the truth value of which can vary across circumstances that differ with respect to scheme.

we are reminded of the three possibilitites:
**Possibility 1:** All inconstant DRMAs are so in virtue of satisfying condition (i); or

**Possibility 2:** All inconstant DRMAs are so in virtue of satisfying condition (ii); or

**Possibility 3:** Some inconstant DRMAs are so in virtue of satisfying (i) and others are so in virtue of satisfying (ii), and all such DRMAs satisfy one condition or the other.

We have good reason to rule out Possibility 1, the acceptance of which amounts to the acceptance of the shallow view, since we have seen evidence that at least one DRMA—namely, (S14)—fails to satisfy condition (i). But, unless we go through all of the DRMAs, it would be perhaps quite difficult to use the linguistic data discussed here to adjudicate between Possibility 2, the acceptance of which amounts to the acceptance of the deep view, and Possibility 3, the acceptance of which amounts to the acceptance of the mixed view. How are we to decide between these remaining options?

I am moved by the conceptual argument offered in Chapter 3, and I think that you should be, too. The deep view makes good on the claim that the scheme-neutral fragment of language is conceptually prior to the scheme-explicit fragment in a way that the mixed view does not. In other words, by adopting the deep view, we are able to take inconstancy *fully seriously*, whereas on the mixed view, we are able to take it *only sorta seriously*, and on the shallow view, we aren’t able to take it seriously at all. To fully establish the conceptual priority claim, we need full seriousness. This, I take it, constitutes, not only an additional good reason to opt for the deep view over the shallow view, but also a good reason to opt for the deep view over the mixed view.

I have not pretended to offer a knock-down argument for the deep view anywhere in these four chapters. Instead, my goals have been to introduce the view, spell out its
mechanics, defend it from some immediate objections, and show both (i) that the view can be motivated both conceptually and linguistically, and (ii) that the view offers us new and interesting options when it comes to certain metaphysical and metametaphysical issues. In light of all of this, I feel safe in concluding at this point that, if we want the best account of the inconstancy of DRMAAs, the deep view is the way to go. In other words, I take it that we have good reason to accept that the following proposition is true:

(P47) The deep view offers the best account of inconstancy.

4.6. Relativism and Retraction

So, are we done? Not quite yet, as we’ve not yet settled whether we should adopt a MacFarlanian relativistic (henceforth, just relativistic) version of the deep view or the more standard, non-relativistic version. On the standard account, we evaluate the truth of the proposition expressed by

(S14) Dwight could receive a promotion relative to the circumstance of its context of utterance, i.e. the circumstance having as the values of its various parameters the world, time, scheme, etc., operative in the context in which Jim uttered (S14). On the relativistic version, we evaluate that proposition with respect to a circumstance having as the values of its various parameters the world, time, etc., operative in the context of (S14)’s utterance, and the scheme operative in the context

15 I put aside here any discussion of relativism in the Recanati-Kölbel or Cappelen-Hawthorne senses. On any formulation, the deep view will be relativistic in the Recanati-Kölbel sense, as it posits a scheme parameter. Whether or not a given formulation of the deep view counts as relativistic in the Cappelen-Hawthorne sense will depend on whether that formulation posits a privileged scheme, which, as before, is not a topic I will pursue here.

16 Unless, of course, the values of the circumstantial parameters are shifted through the use of operators. I leave this complication aside for now.
of (S14)’s assessment, i.e. the context in which the truth of (S14) is being assessed. In different contexts of assessment, (S14) might be evaluated differently; if so, and we adopt this relativistic framework, say that the proposition (S14) expresses is scheme-assessment-sensitive.

One way to check for assessment-sensitivity in general is to look at relevant data involving the retraction of an assertion made by an agent sometime after that assertion was originally asserted. To illustrate, let’s shift our focus from DRMAs to discourse about tastiness. MacFarlane says

> When I was a kid, I once told my mother, “Fish sticks are tasty.” Now that I have exposed my palate to a broader range of tastes, I think I was wrong about that; I’ve changed my mind about the tastiness of fish sticks. So, if someone said, “But you said years ago that fish sticks were tasty,” I would retract the earlier assertion. I wouldn’t say, “They were tasty then, but they aren’t tasty any more,” since that would imply that their taste changed.

Suppose we adopt a view according to which

(S117) Fish sticks are tasty.

is gustatory-standard-nonindexical, and the proposition $p$ it expresses in the context in which young MacFarlane uttered it is gustatory-standard-circumstantial. If so, then grown-up MacFarlane would have to say that, while (S117) is false relative to his current circumstance (with the more refined gustatory standard operative), what he said when he originally uttered (S117) was true, as $p$ is true relative to the circumstance of (S117)’s context of utterance (with the less refined gustatory standard operative). But this could hardly be considered a genuine retraction of his assertion of (S117), as he would still have to acknowledge that, when he uttered (S117), it was true.

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17 See Chapter 3, Section 3.6.3.
If we instead adopt a relativistic view about tastiness discourse, then when grown-up MacFarlane evaluates \( p \) as expressed by (S117) all those years ago, he does not do so by adopting the circumstance of (S117)’s context of utterance (with the less refined gustatory standard operative). Instead, since \( p \) is taken by the relativist to be \textit{gustatory-standard-assessment-sensitive}, he uses the circumstance that has as the values of its various parameters the world, time, etc., operative in the context of (S117)’s utterance,\(^\text{19}\) and the gustatory standard operative in his current context of assessment. Evaluating \( p \) with respect to \textit{that} circumstance (with the more refined gustatory standard operative), grown-up MacFarlane is able to \textit{really} retract his earlier assertion, now taking what his younger self said regarding fish sticks to be false—\textit{even at the time when his younger self said it}. Thus, relativism about tastiness allows us to make sense of grown-up MacFarlane’s retraction of his earlier assertion of \( p \) in a way that the non-relativistic view does not. This constitutes good reason to adopt a relativistic view about tastiness discourse.

Of course, even if relativism is appropriate for tastiness discourse, it is not appropriate for all areas of discourse. Consider an utterance, at a time \( t \), of

\begin{quote}
(S118) I am walking.
\end{quote}

by MacFarlane, who is walking. If, at a later time \( t^* \), MacFarlane, no longer walking, utters

\begin{quote}
(S119) I am not walking.
\end{quote}

he is clearly not \textit{retracting} his earlier assertion of the proposition expressed by (S118) in

\(^{19}\) This will be crucial when there are indexical expressions in a sentence. For example, if grown-up MacFarlane later assesses an earlier utterance of ‘Fish sticks are tasty now’, the content of ‘now’ is determined using the time of the context of utterance, not of the context of assessment.
doing so. Instead, he should continue to hold that what he said at t was true at t. If we were to take (S118) to express a time-assessment-sensitive proposition, however, then, relative to his current circumstance (with t* operative), he would be committed to saying that what he said at t was false—even at the time at which he said it. This is a bizarre result, and counts against taking temporary propositions to be time-assessment-sensitive. Thus, we see good reason to avoid relativism about temporality.

When trying to decide whether or not we should adopt a relativistic version of the deep view, we need to determine whether inconstant propositions are more like temporary propositions or more like those involved in tastiness discourse. What we need, then, is to consider a purported retraction case involving inconstancy. Suppose that Jim is in the office and involved in a conversation in which Dwight’s job performance is assigned more weight than his dismal interpersonal skills, with the latter perhaps even being ignored. Jim utters our old friend

\[(S14)\] Dwight could receive a promotion.

and it is taken to be true. Later in the day, Jim finds himself involved in a different conversation, this time one in which Dwight’s dismal interpersonal skills are assigned more weight than his job performance, with the latter perhaps even being ignored. He utters our other old friend

\[(S115)\] Dwight could not receive a promotion.

The crucial question then, is this: in uttering (S115), is Jim retracting his earlier assertion of (S14)?

I think not. Jim would probably still acknowledge that (S14) is true relative to the circumstance of the context of its utterance (with the performance-oriented scheme
operative), even though it is false relative to his current circumstance (with the
personality-oriented scheme operative). If someone were to call Jim out and say “hey,
you just said that Dwight couldn’t receive a promotion, but I remember not too long ago
you saying that he could,” I don’t think it would be inappropriate for Jim to respond by
saying something along the lines of “well, it is true if you focus on those traits, but I’m
not talking about those anymore,” which does not constitute a retraction. What Jim has
done is merely shift focus; he hasn’t disowned his previous claim.

We should adopt a relativistic version of the deep view only if the retraction data
call out for such a view. But, at least in the case just presented, they don’t. I take it that
this will generalize to other cases, as well. So, if what I have said is correct, then, while
we have seen good reasons to adopt the deep view over both the shallow and mixed
views, we have not seen a good reason to adopt it in its relativistic version. If we want to
best account for the inconstancy of DRMAs, the standard, non-relativistic deep view is
the way to go.

Now we’re done.
References


Appendix: Sentences and Propositions

This appendix contains a full list of all of the sentences and propositions displayed throughout this dissertation, divided into groups based on the chapter in which they are first introduced.

A.1. Chapter 1: Inconstancy Circumscribed

A.1.1. Sentences

(S1) McCain could have won the election.

(S2) McCain couldn’t have won the election.

(S3) Obama is hungry.

(S4) Obama is taller than Biden.

(S5) If Obama is taller than Biden, then Biden is shorter than Obama.

(S5*) Obama is an \( x \) such that, if \( x \) is taller than Biden, then Biden is shorter than \( x \).

(S6) 1, 2, 3, … are all less than \( \kappa_0 \).

(S7) The Cheerios are tasty.

(S8) The Lucky Charms are tastier than the Cheerios.

(S9) The round square is round.

(S10) \( \Delta \) is such that it is the set of all sets.

(S11) Tigers have four legs.
(S12) The round square could be round.
(S13) Obama could be hungry.
(S14) Dwight could receive a promotion.
(S15) Dwight Schrute III is essentially the son of Dwight Schrute, Jr.
(S16) Dwight could have grown from a people seed.
(S17) Humphrey could have been an angel.
(S18) Humphrey could have been born to different parents.
(S19) Humphrey could have been born to different parents in ancient Egypt.
(S20) Obama could have won and lost the election.
(S21) Obama could be married and not married.
(S22) Obama could be taller and not taller than Joe Biden.
(S23) Obama couldn’t have won and lost the election.
(S24) Obama could be neither married nor not married.
(S25) Obama could be neither President nor not President.
(S26) Obama could be not identical to Obama.
(S27) Obama couldn’t be neither married nor not married.
(S28) Obama could have been President in 2011.
(S29) Obama could have been married in 2011.
(S30) Obama could have been born in the United States
(S31) Obama couldn’t be President in 2011.
(S32) Obama could be a twin prime number.
(S33) Obama could be divisible by two.
(S34) Obama couldn’t be a twin prime number.
(S35) Obama couldn’t be divisible by two.

(S36) I am sitting.

(S37) Wesley is sitting now.

(S38) I am actually here now.

(S39) Wesley is in University Hall at 3:26 PM on July 18th, 2012 in @.

(S40) At 10:30 AM, on July 23rd, 2015, Dwight could receive a promotion.

(S40*) At 10:30 AM, on July 23rd, 2015, it was the case that Dwight could receive a promotion.

(S40**) Dwight could have received a promotion, and he could have received it at 10:30 AM, on July 23rd, 2015.

(S41) Dwight exists.

\[ A.1.2. \text{Propositions} \]

(P1) Possibly, Obama is hungry.

(P2) Obama is possibly-hungry.

(P2) Possible-(Obama) is hungry.

(P4) Obama is-possibly hungry.

(P5) Obama is hungry.

(P6) Wesley is sitting.

(P7) Obama is hungry in w.

(P8) Obama is hungry in w'.

(P9) Obama is hungry at 7:31 PM on April 30th, 2011.

(P10) Obama is hungry at 12:00 AM on January 1st, 3999.
A.2. Chapter 2: Shallow Inconstancy

A.2.1. Sentences

(S42) McCain is sitting.

(S43) McCain was sitting.

(S44) McCain will be sitting at noon on May 10th, 2020.

(S45) Lump could survive being squished.

(S46) It is not the case that Statue could survive being squished.

(S47) He could have won the election.

(S48) You could be maimed by a tiger tomorrow.

(S49) Someone else will be maimed by a tiger tomorrow.

(S50) This pizza box in front of me could have been shredded.

(S51) Something is shredded.

(S52) Something represents this pizza box as being shredded.

(S53) Something is represented as shredded.

(S54) McCain is not sitting.

(S54) McCain could be sitting.

(S55) McCain is actually sitting.

(S56) In view of what their tribal duties are, all Maori children must learn the names of their ancestors.

(S57) In view of what is known, the ancestors of the Maoris must have arrived from Tahiti.

(S58) All Maori children learn the names of their ancestors.

(S59) The Maoris arrived from Tahiti.
(S60) All Maori children must learn the names of their ancestors.

(S61) The ancestors of the Maoris must have arrived from Tahiti.

(S62) Come look at this!

(S63) ?Rain is wet, and it is accessible from itself in S4.

(S64) ?McCain could have won the election, and it is such that personal background and accomplishments are weighted more heavily than contemporary political climate.

(S65) ?McCain could have won the election, and it reflects my interests.

(S66) I proposed, and she said ‘no’.

(S67) I painted, and it turned out nice.

(S68) I followed the recipe, but it turned out terrible.

(S69) ?Maori children must learn the names of their ancestors, and they are onerous.

(S70) ?The ancestors of the Maoris must have arrived from Tahiti, and it is the incredibly detailed result of painstaking research.

\[ A.2.2. \textit{Propositions} \]

(P11) McCain is sitting.

(P12) Some of McCain’s temporal parts that exist prior to McCain-at-\( t \) are sitting.

(P13) McCain-at-noon-on-May-10th-2020 is sitting.

(P14) McCain-at-\( t^* \) is sitting.

(P15) McCain-in-\( s \) could have won the election.
(P16) McCain-in-s* could have won the election.

(P17) McCain, could have won the election.

(P18) McCain,s could have the election.

(P19) All members of the class M,s could have won the election.

(P20) All members of the class M,s could have won the election.

(P21) Lump could be squished and continue being a lump of clay.

(P22) It is not the case that Statue could be squished and continue being a statue.

(P23) McCain has a political-history counterpart who won the election.

(P24) McCain has a political-climate counterpart that won the election.

(P25) McCain could-have-won-the-election-in-s.

(P26) McCain could-have-won-the-election-in-s*.

(P27) McCain is sitting-at-t.

(P28) It is not the case that McCain is sitting-at-t*.

(P29) McCain is sitting-in-w.

(P30) McCain is sitting-in-w*.

(P31) All Maori children must in view of s learn the names of their ancestors.

(P32) All Maori children must in view of what their tribal duties are learn the names of their ancestors.

(P33) All Maori children must in view of their biological make-up learn the names of their ancestors.

(P34) McCain could have in view of s won the election.

(P35) McCain could have in view of s* won the election.
A.3. Chapter 3: Deep Inconstancy

A.3.1. Sentences

(S71) Obama is President of the United States of America.

(S72) Obama is President of the United States now.

(S73) Obama is essentially rational.

(S74) Obama could be taller.

(S75) Obama could have been a talking donkey.

(S76) Obama could have lost to McCain.

(S77) McCain could have been President of the United States of America.

(S78) Rain is wet.

(S79) Brigitte Bardot is French.

(S80) Actually, Brigitte Bardot is French.

(S81) By some lights, McCain could have won the election.

(S82) By some lights, I know I’m not a brain in a vat.

(S83) By some lights, Italy is boot-shaped.

(S84) By some lights, the Mona Lisa is beautiful.

(S85) By some lights, tofu is delicious.

(S86) Lump and Statue are distinct.

(S87) Dwight is sitting.

(S88) It is not the case that Dwight is sitting.

(S89) Dwight and Dwight are distinct.

(S90) Statue is valuable.

(S91) It is not the case that Lump is valuable.
A.3.2. Propositions

(P36) Obama is President of the United States of America.

(P37) All of Obama’s bodily counterparts are rational.

(P38) All of Obama’s personal counterparts are rational.

(P39) Obama could have been 6’4”.

(P40) McCain could have been President of the United States of America.

(P41) In s, McCain could have won the election.

(P42) In s*, McCain could have won the election.

(P43) The Mona Lisa is beautiful.

(P44) Thing could survive being squished.

(P45) It is not the case that Thing could survive being squished.

(P46) Thing and Thing are distinct.

A.4. Chapter 4: Inconstancy and Content

A.4.1. Sentences

(S92) Obama won the 2008 Presidential election.

(S93) Karen and Holly agree that Obama won the 2008 Presidential election.

(S94) It’s raining.

(S95) Karen and Holly agree that it’s raining.

(S96) Jim and Pam agree that Dwight could receive a promotion.

(S97) Jim and Pam agree that Dwight could receive a promotion, and Creed believes it, too.

(S98) Jim has a true belief that p.
Pam agrees with Jim that $p$.

Pam has a true belief that $p$.

Relative to circumstance $E$, Jim’s belief that $p$ is true.

Relative to circumstance $E^*$, Pam’s belief that $p$ is true.

Dwight is sitting next to Phyllis.

Jim and Pam agree that Dwight is sitting next to Phyllis.

The ancient Greeks agree with the ancient Indians that circles are round.

Pythagoras agreed with Gödel that numbers are neat.

Alec, Pierre and Franz agree that they were lucky to be born where they were actually born.

Alec, Pierre and Franz each consider each of Alec, Pierre and Franz lucky to be born where they were actually born.

Alec, Pierre and Franz each consider themselves lucky to be born where they were actually born.

McCain would have made a great President.

McCain would have not made a great President.

Karen and Holly disagree about whether McCain would have made a great President.

It’s not raining.

Karen and Holly disagree about whether it’s raining.

Dwight could not receive a promotion.

Jim and Pam disagree about whether Dwight could receive a promotion.

Fish sticks are tasty.
(S118) I am walking.

(S119) I am not walking.

\textit{A.4.2. Propositions}

(P47) The deep view offers the best account of inconstancy.