Troubles for Content I

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1 Introduction

An important theme in recent philosophy is how little is required to have a concept. To borrow one of Tyler Burge's (1979) famous examples, Abigail believes that she has a three-year contract with her cell phone provider. But she also believes that contracts must be in writing; indeed, she believes this is definitional, part of the concept of a contract, and part of what it is to be a contract. Despite her confusion on this issue, Abigail has the concept CONTRACT, in a common and relatively pre-theoretical sense—i.e., she has the ability to have thoughts involving the concept.

It is widely accepted that thinkers can have thoughts involving concepts that, intuitively, they incompletely grasp. I argue, however, that the import of the phenomenon for the theory of linguistic and mental content has not been adequately appreciated: leading theories of content, even if they can specify modal determinants or grounds of content, lack an account of what it is for a representation to have content. (I will focus on the theory of mental content, but the arguments generally apply to the linguistic case as well.)

It is by now a familiar point that there are no beliefs or inferences, or transitions in thought more generally, that a thinker must have or be disposed to make in order to have a particular concept. An important source is Quine's influential suggestion, backed up by appeal to the history of science, that "no statement is immune to revision" (1980: 43). Quine was skeptical about meaning and semantic notions generally, but contemporary philosophers who have no quarrel with semantic notions have taken the crucial point to be that any statement can rationally be rejected without

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1 I will write "a thought involving concept C" as shorthand for "a thought in the content of which the concept C figures."

2 More carefully, any beliefs or dispositions of thought that a thinker must have in order to have a concept will not be sufficient uniquely to individuate the concept. For example, even if it were true that in order to have the concept DOG, a thinker must be disposed to infer from the belief that Rover is a dog to the conclusion that Rover is a physical object, such an inferential disposition obviously would not be sufficient to individuate the concept. I will generally omit this qualification.
changing its meaning. In effect, the point they draw from Quine is that there is no sentence that a thinker must accept, or belief that a thinker must hold, in order to be able to use a word with its ordinary meaning or to have a thought involving a particular concept.³

Burge (1979, 1986) has done more than anyone to convince philosophers of this kind of point.⁴ He powerfully argues that, for a very wide range of concepts, thinkers can have thoughts involving those concepts without having the inferential or judgmental dispositions that are intuitively most central to them. In this chapter, I will for the most part assume that this phenomenon is real and not address attempts to reinterpret putative examples, for instance by treating them as de re attributions or as a loose but convenient way of talking.⁵ It is worth noting that there are several different types of (putative) examples of the phenomenon.⁶ What matters for my argument is that there are some genuine cases; therefore, rejecting even entire categories of examples will not affect the argument as long as some cases remain. (For those who remain skeptical, my argument can be taken as conditional.)

A core idea in the theory of content is that a thinker's grasp, mastery, or implicit understanding determines which concepts figure in her thought (or determines the meaning of her words).⁷ A specific version of this idea is that what it is to have a concept is to have a competence with its governing rule or conditions of application. The idea has been given prominent theoretical articulation in conceptual-role theories of content. The phenomenon of incomplete understanding obviously poses a challenge to such theories. But the implications of the challenge have not been adequately appreciated.

First, I briefly argue that covariation theories are vulnerable to a parallel problem (though I cannot develop the point fully here). A thinker can have a concept without having an ability to discriminate what falls under it. Indeed, I suggest that covariation theories are, at base, developments of the same core idea as conceptual-role theories, starting from a different presupposition about how concepts are individuated. Second, an appeal to deference to other people cannot rescue conceptual-role and covariation theories.

⁴ Putnam’s (1975, 1975/1979) discussions of the analytic/synthetic distinction were important as well. Kripke’s (1980) arguments were also no doubt influential in convincing philosophers of the point.
⁵ For responses to attempted reinterpretations, see Burge (1979); and Greenberg (2007). See also Section 2.
⁶ For example, in addition to cases in which some thinkers in a community have mastery and historical cases in which no one had mastery of the relevant concepts, there are Burge’s (1986) non-standard theory examples. For development of logical cases along these lines, see Williamson (2008). For ethical examples, see Greenberg (2009).
⁷ It is important that the relevant notion of determination here is not mere modal determination. Rather, the idea is the more intuitive one that the thinker’s competence with a concept C is what explains why C figures in her thought. If the thinker’s competence had instead corresponded to a concept C∗, C∗ would have figured in her thought. In the next section, I will make the idea of correspondence between a thinker’s competence and a concept more precise in the discussion of conceptual-role theories by saying, e.g., that the inferences the thinker is disposed to make are individuating of the concept.
theories, because, properly understood, such an appeal is an abandonment of those theories. A proviso about deference to others, understood in the most promising way, specifies an additional way in which a representation’s having content can be determined or grounded, one that is inconsistent with the central position of conceptual-role and covariation theories about what it is for a representation to have particular content. In sum, if incomplete understanding is real, having a concept does not require having full grasp or mastery of it, so the core idea that explains the content of thought in terms of the thinker’s exercising grasp or mastery of concepts must be abandoned. A different account of what it is for a representation to have content is needed.

Unfortunately, having a concept is not always carefully distinguished from having full grasp or mastery of a concept. “Having a concept,” in the ordinary sense mentioned above, is simply shorthand for “having the ability to have thoughts involving a concept.” By contrast, to have full grasp or mastery of a concept is to have something along the lines of an implicit understanding of the concept. Even when having a concept and having mastery of a concept are distinguished, it often seems to be taken for granted that having a concept requires mastery of it—or even that what it is to have a concept is to have mastery of it. To make things worse, the term “having a concept” and similar terms such as “possessing a concept” and “grasping a concept” are used ambiguously—sometimes for having the ability to have thoughts involving a concept and sometimes for having mastery of the concept. I will use the term “having a concept” exclusively in the former sense.

A few preliminaries. I use the term “thought” as a generic term for propositional attitudes, rather than their contents. Concepts are the components of the contents of thoughts. It will often be convenient to frame the discussion in terms of one concept, rather than a whole propositional content, asking what it is for a mental representation
to have a content involving a particular concept. This focusing of the discussion at the level of individual concepts is merely an expository device; I intend it to be neutral with respect to holistic and anti-holistic views of concepts and content attribution.

I am going to use the term “incomplete understanding” for the phenomenon of thinkers’ having a concept without having beliefs or inferential dispositions sufficient to individuate the concept. This label is tendentious because many philosophers have taken the phenomenon in question to show that concepts are not individuated by beliefs or mental transitions, but solely by the properties to which they refer. If that view of concept individuation is correct, then lacking a belief or inferential disposition does not make it the case that one has incomplete understanding of a concept. The present chapter is primarily concerned, however, with conceptual-role theories, which take concepts to be individuated by mental transitions. Moreover, as noted, considerations parallel to those concerning inferences show that thinkers can have a concept without having an ability to discriminate what falls under the concept. So, even on a view on which a concept is individuated by the property to which it refers, the term “incomplete understanding” is apt.

In Section 2, I show that conceptual-role theories have a problem accounting for thoughts involving incompletely understood concepts. I explain why an appeal to ideal conditions—or more generally to a competence/performance distinction—does not address the problem. In Section 3, I turn to the appeal to deference. I distinguish three different understandings of the role of deference and argue that the only one on which deference could plausibly bear the explanatory burden placed on it is an understanding on which deference provides an additional way of having a concept. But, on this understanding, allowing that a thinker can have a concept in virtue of deference to others is inconsistent with a conceptual-role or covariation theory’s central account of what it is to have a concept. In the companion Chapter 6, “Troubles for Content II: Explaining Grounding,” I consider the suggestion that theories of content need only specify determinants or grounds of content. I argue that, in general, the determinants or grounds of a phenomenon can be explained by an account of the nature of the phenomenon. We should therefore not be satisfied with accounts that specify how content is determined or grounded.

2 Conceptual-role theories—and covariation theories too

In this section, I explain why the phenomenon of incomplete understanding presents a problem for conceptual-role and covariation theories and, in particular, why an appeal to ideal conditions or a competence/performance distinction cannot solve the problem. Conceptual-role theories presuppose that each concept has a canonical role

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11 On this point, see the end of Section 2.
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in thought, which is individuating of the concept. The details will not matter for
our purposes, but I will generally understand conceptual-role theories as allowing
a concept’s canonical role to include not only a role in inferences, but a role in a
thinker’s mental economy more generally. Indeed, my arguments apply to long-armed
conceptual-role theories—ones that take the relevant role to include relations with
the external world—as well as conceptual-role theories that take conceptual-role not
to include external relations. But, for expository convenience, I will generally talk of
canonical inferences.

Given the notion of a concept’s canonical role, the conceptual-role theorist can say
that a representation has a content involving a particular concept in virtue of the
thinker’s being disposed to make transitions involving the representation in a way
that instantiates the concept’s canonical role. A conceptual-role theory thus offers a
way of spelling out the intuitive idea that a thinker’s implicit understanding or grasp is
what makes it the case that a mental representation has a content involving a particular
concept C rather than some other concept C*. The notion of a disposition to make a
concept’s canonical inferences—a concept’s canonical disposition, for short—is a way
of making precise the idea of grasp of a concept.

The term “disposition” could be misleading to the extent that it suggests a relatively
surface-level phenomenon. As I use the term, the fact that one has a disposition to
make certain transitions does not imply that she will do so in practice. A person can
have a disposition to /Phi1 in circumstances C, even if the person regularly does not
/Phi1 in circumstances C. Interfering factors or failure of background conditions may
prevent the disposition from being manifested. In the terms originally introduced by
Chomsky, when a sophisticated conceptual-role theory claims that having a concept
is having a concept’s canonical disposition, it makes a claim about a thinker’s compe-
tence, not about her performance.

It is obvious why incomplete understanding is prima facie problematic for
conceptual-role theories. As just described, according to conceptual-role theories,
to have a concept is to have the concept’s canonical disposition. But, assuming the
phenomenon of incomplete understanding is genuine, one who has a concept need
not be disposed to make any particular inference.

I have thus far described only the basic idea of a conceptual-role theory. Philoso-
phers have developed theories that are more sophisticated in various ways. Much
of the literature in the theory of content focuses on what I will call “the problem
of error,” often discussed under the labels of the “Kripkenstein” and “disjunction”
problems. The problem, very roughly, is to explain how a thinker’s dispositions can

12 Some writers reserve the term conceptual-role theory for the position that the content of a representa-
tion is the use or role of that representation in a thinker’s mental economy. My terminology does not saddle
conceptual-role theories with this implausible position. For discussion, see Greenberg and Harman (2006).
13 Using this label is a simplification. There are a cluster of related issues, some of which are arguably
more fundamental than allowing for error.
determine that he is using a particular concept, if he makes what are (intuitively) mistakes in the use of the concept. Or, to put it another way, the problem is to explain why a thinker who apparently makes mistakes in using one concept is not correctly using a different concept. It might be thought that the resources introduced in response to the problem of error enable conceptual-role theories to accommodate the phenomenon of incomplete understanding. In order to give the best possible case to conceptual-role theories, we can consider responses to the problem of error offered by theorists of content generally (not just those offered by conceptual-role theorists).

We can distinguish three categories of responses. First, some theories appeal to ideal epistemic conditions or the like in order to specify more precisely what is involved in having the relevant content-determining disposition. The thought is that, correctly understood, having that disposition will be compatible with making errors, even systematic ones, in using the concept. Second, some philosophers have thought that the fact that a thinker who has a concept C can fail to make judgments or inferences apparently central to C shows that theories of content must take concepts to be individuated at the level of reference, not by their role in thought. This idea is an important motivation for covariation theories of content. Third, it is common for theories of content to appeal to other people to explain how a thinker whose understanding is deficient could nonetheless have a thought involving a particular concept.

In most of the rest of this section, I address ideal epistemic conditions. At the end of the section, I briefly consider the response that abandons conceptual-role theories in favor of covariation theories. In Section 3, I turn to the appeal to other people.

2.1 Ideal epistemic conditions and the competence/performance distinction

The basic idea of responses in the first category is to allow for mistakes in performance, while holding to the idea that the thinker has the appropriate competence. The strategy is illustrated by an appeal to ideal or optimal epistemic conditions. A thinker who will make a concept’s canonical inferences under ideal conditions is a thinker who has the relevant competence—the disposition to make the concept’s canonical inferences. Similarly, some theorists have appealed to ceteris paribus clauses. Again, a thinker who makes a concept’s canonical inferences when other things are equal, for example, when nothing interferes, is a thinker who has the relevant competence. Other theories, rather than trying to get at the underlying disposition indirectly by factoring out non-ideal conditions or interfering factors, try to specify the relevant competence directly. For example, Peacocke’s (1998) account appeals to a thinker’s implicit conceptions, which are taken to be at a sub-personal level.

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16 Rey’s (1998) appeal to meaning postulates and Peacocke’s (1992) theory, discussed immediately below, are other examples.
Such approaches distinguish a relatively superficial level of behavioral manifestations—performance—from a deeper level of competence. The mistakes and confusions identified by putative examples of incomplete understanding can then be attributed to factors other than competence. It is the competence that is content-determining. For example, in response to examples of confused beliefs and theories, it may be maintained that the content-determining dispositions are more basic than, and not based on, beliefs and theories. The mistaken beliefs are therefore dismissed as interfering factors that prevent the underlying dispositions from being manifested.

An appeal to a competence/performance distinction, ideal conditions, or the like, cannot account for cases of incomplete understanding. Such responses to the problem of error attempt to refine our understanding of what it is to have a disposition to make clear that having such a disposition is consistent with failing to make the appropriate inferences, even failing to do so systematically. These are effective responses to cases in which thinkers, either because of outside interference or because of shortcomings of peripheral capacities such as memory or attention, fail to make inferences that they have a disposition or competence to make. But the familiar point discussed in the previous section is that people need not have any particular inferential disposition in order to have a given concept. The examples that are used to support the point are (supposed to be) examples of thinkers who simply lack the appropriate disposition or competence. Such thinkers will not make the appropriate transitions in thought even under ideal conditions or when other things are equal.

In other words, we can distinguish between cases of incomplete understanding and cases of mere ordinary error. In a case of genuine incomplete understanding, a thinker lacks the relevant competence. He is not disposed to make the relevant transitions in thought. By contrast, in a case of ordinary error, a thinker has the relevant competence, but fails to manifest it. Conceptual-role theories that appeal to ideal conditions, ceteris paribus clauses, and the like offer promising approaches to explaining ordinary error. But they have no prospect of allowing for genuine incomplete understanding because their central claim is that what it is to have a concept is to have the concept’s canonical disposition.

To illustrate the point, I use Peacocke’s (1992) theory (because it is probably the most influential and best developed conceptual-role theory). Peacocke first offers an account of concepts and concept mastery. According to this account, each concept has a “possession condition” which is a condition for fully grasping or mastering the concept, and that condition is the concept’s fundamental identity condition (1–27).18

17 It is plausible that some minimal competence is necessary to have a concept. But the point is that the competence will not be sufficient to individuate the concept; the thinker will lack, e.g., a disposition to make the concept’s canonical inferences.

18 As Peacocke (1992: 5–6, 29) recognizes, the possession conditions have to be conditions for fully grasping the concepts in question, as opposed to merely conditions for having thoughts involving those
Peacocke’s theory of content is tightly linked to his theory of concepts. According to his theory of content, what makes it the case that a thought involves a particular concept is (1) that the thinker is primitively compelled to make mental transitions of the type specified by the concept’s possession condition (i.e., simplifying slightly, he must find them compelling and not because he has inferred them from something else), and (2) that the causal explanation of the thinker’s finding these inferences primitively compelling is that they are of that type (1992: 107–11, 134–45, 177–97).

Peacocke uses this account to offer a solution to the problem of error, specifically in the form of the Kripkenstein problem. The solution is a version of the competence approach: it holds that a thinker who has the concept, though he may make mistaken inferences, must find the canonical inferences primitively compelling and, crucially, the causal basis of the primitive compulsion must be that the inferences are of the form specified in the concept’s possession condition (1992: 133–45, 190–7). Because Peacocke’s account of what determines the content of thought depends on the assumption that thinkers satisfy the possession conditions for the concepts that they deploy, the account cannot explain thoughts involving incompletely grasped concepts.\(^\text{19}\)

It might be suggested that we should respond by relaxing the view that to have a concept is to have its canonical disposition. Instead, we should maintain that having a concept is having a disposition that approximates the concept’s canonical disposition to some degree (which perhaps varies depending on the context).\(^\text{20}\) First, the relevant dispositions—i.e., the most basic dispositions to deploy the representation in question—of a thinker who putatively has incomplete understanding of a concept C will, in general, approximate the canonical dispositions of indefinitely many concepts. So the proposal would have the consequence that the thinker would not have C; instead, the relevant representation would have indeterminate content. By contrast, a proposal that the concept a thinker has (the one expressed by the representation in question) is the one whose canonical dispositions he most closely approximates would have the consequence that the thinker would not have C, but a different concept.

\(^{19}\) At one point early on, Peacocke recognizes that incomplete understanding poses a problem for his account. He explicitly concedes that, because of incomplete understanding, his possession conditions cannot yield an account of what determines the content of thought. He appeals to deference to members of the linguistic community to account for such cases (1992: 27–30). As noted in the text, however, when he offers his account of what determines the content of thought, he ignores his earlier concession and gives an account that depends on a thinker’s satisfying the possession conditions for the concepts in question. As I elaborate in Section 3, he does not integrate deference into his theory of content. The present point is that, setting aside the question of deference to others, his theory nicely illustrates why conceptual-role theories cannot account for incomplete understanding. A theory that explains why a representation’s content involves a particular concept by appeal to the representation’s having the appropriate role in the thinker’s mental economy—the concept’s canonical role—obviously cannot account for a thinker’s having a representation whose content involves the concept when the representation does not in fact have the appropriate role in the thinker’s mental economy.

\(^{20}\) Thanks to Alexis Burgess for pressing me to address this point.
When a thinker has incomplete understanding of a concept C, there will often be a concept C* such that the thinker’s relevant dispositions are those of C*.

For instance, the thinker in the CONTRACT example would have a concept that refers to written agreements, rather than the concept CONTRACT. Even when the thinker’s relevant dispositions are not the canonical dispositions of any concept, there will typically be a concept C** such that the thinker’s relevant dispositions more closely approximate C**’s canonical dispositions than C’s.

Faced with the failure of the ideal conditions/competence approach to accommodate incomplete understanding, one “bullet-biting” response is to reject the putative examples of incomplete understanding. Although thinkers can have mistaken beliefs that prevent the content-determining dispositions from being manifested, if a thinker really has the concept in question, the thinker must have the relevant disposition. Thus, according to this line of argument, a thinker who is able to think thoughts involving the concept CONTRACT must in fact have the appropriate competence with the concept, despite his or her more superficial belief that contracts must be written. Pre-Einsteinian physicists who used “kinetic energy” with the same meaning as we do, but apparently took \( e = \frac{1}{2}mv^2 \) to be definitional of “kinetic energy,” must in fact have rejected that definition at a deeper level at which they had a correct implicit understanding.

First, the bullet-biting response seems motivated not by the data of ordinary attributions of content, but by a desire to preserve the conceptual-role theory. For example, there is nothing in the description of the examples to suggest that the thinkers in fact have the relevant inferential dispositions at a fundamental level. To the contrary, the descriptions stipulate that the thinkers reject the relevant inferences or judgments (even if those descriptions do not explicitly address the possibility of some kind of fundamental and relatively inaccessible competence). Yet the tendency to think that the thinkers have the relevant concepts is strong. In other words, our willingness to attribute thoughts involving a concept does not depend on having reason to believe that the thinker in fact has the relevant competence.

Second, in many actual cases, it is implausible that thinkers to whom we attribute thoughts involving incompletely understood concepts in fact have the appropriate competence. Think, for example, of historical cases in which thinkers used concepts before anyone understood them well. Or consider contemporary thinkers who have fundamental confusions. Aside from philosophical theories that have the consequence that one cannot have a concept without having the appropriate competence, what reason is there for thinking that such thinkers in fact already possess the competence at a less superficial level?

Third, a philosopher who adopts the competence/performance line of defense is pulled in different directions by different cases. For example, in the case of Burgean

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21 In some cases, the thinker’s dispositions will not be the canonical dispositions of any genuine concept, e.g., because there is no property that makes the relevant inferences truth preserving.

non-standard theory examples, such a philosopher will want to argue that the non-standard theorist’s original, relatively naïve beliefs accurately reflected his relevant basic dispositions, and that the theorist does not at any point have fundamental-level dispositions that correspond to the theory that he comes to believe. In the case of history of science examples like that of KINETIC ENERGY, however, the philosopher will be under pressure to argue that the scientist’s original beliefs failed to accurately reflect her relevant basic dispositions, and that she possessed basic dispositions from the start that correspond to the sophisticated theory that she comes to believe. When we put together these two kinds of responses, a proponent of the bullet-biting defense is in an awkward position. She has to maintain that when a theorist abandons a claim that is apparently central to one of his concepts, not only is there no impact on the theorist’s basic inferential dispositions, but those dispositions turn out to track either the theorist’s original relatively naïve beliefs or the later radical theory, whichever is in fact true. It is difficult to see what could justify this doctrine of infallibility of basic dispositions.

There is obviously much more to be said both for and against an approach that bites the bullet and insists that a thinker who has a thought involving a particular concept must have the relevant competence even if it is deeply inaccessible, thus denying the phenomenon of incomplete understanding. My primary goal here is not to argue for the existence of the phenomenon, however, but to draw out consequences of it that have not been adequately recognized. It is easy to see that the phenomenon that is widely accepted is inconsistent with the claim that a thinker must have the relevant competence. Consider philosophers who take Quinean revisability considerations to show that a thinker can reject even inferences apparently central to the meaning of a word (or constitutive of a concept), while continuing to use the word with the same meaning (or to have thoughts involving the same concept). If rejection of apparently analytic statements takes place only at a superficial level, while the deeper competence is unaffected, then the Quinean considerations do not show that the relevant inferences can be rejected. At most, they show that the relevant inferences need not be manifested at a superficial level. In that case, revisability considerations would provide no reason to reject the claim that there are content-constituting inferences. Similarly, if Burge’s examples were taken to show merely that thinkers can be confused at a superficial level, there would be no need to appeal to other people to explain what makes it the case that the thinkers have thoughts involving the concept in question.

### 2.2 Covariation theories

Before ending this section, I want briefly to address the response of abandoning conceptual-role theories in favor of covariation theories. Jerry Fodor, perhaps the...
leading proponent of covariation theories, takes the fact that there are no inferences that a thinker need be disposed to make in order to have a concept to be an important part of the motivation for such theories. In brief, he thinks that there is no principled distinction between individuating and non-individuating inferences and therefore that concepts must not be individuated in terms of inferences or epistemic capacities more generally. He maintains that conceptual-role theories therefore are hopeless, and a covariation theory is needed. In my view, however, covariation theories suffer from a parallel problem. I cannot develop the argument here, but I want to sketch the point briefly because, if correct, it makes clear that adopting a covariation theory does not really grapple with the fundamental problem posed by incomplete understanding. It also shows that covariation theories are in the same boat as conceptual-role theories with respect to my main line of argument about deference and the inadequacy of an account that merely specifies grounds or determinants of content.

According to covariation theories, the dispositions that constitutively determine the content of thought are dispositions to apply a mental representation to the world, not dispositions to move between mental states. Therefore, having a particular concept is consistent with having a range of different inferential dispositions. But the kinds of mistakes that feature in the examples that are widely thought to raise problems for conceptual-role theories will often rule out a disposition to apply the relevant concept to its instances. If someone's most basic understanding of the concept CONTRACT is the concept of a written agreement, then he will not be disposed to apply the concept to its instances, which include oral agreements (and do not include some written agreements). The relevant mental representation will covary with written agreements, not with contracts. Similarly, assuming for purposes of argument accounts that hold that what makes it the case that a thinker's representation has a particular referent is a historical connection to it. Such accounts cannot be the basis for a full theory of what makes it the case that a representation has a content involving a particular concept since the accounts take for granted intentional notions such as intentions, baptisms, and ostensions. Kripke (1980: 88 fn. 38, 93–7) himself was clear that his seminal discussion of the role of historical chains of communication did not offer the prospect of a theory of reference that can be spelled out without the notion of reference. I discuss historical chain accounts in Chapter 6, footnote 22.

26 There is of course a great deal more to Fodor’s argument. For a brief summary and reply, see Greenberg and Harman (2006: § 5.2).
28 See also Chapter 6, “Troubles for Content II.”
29 The term “apply” papers over a problem for covariation theories of content. The thinker has to be so disposed that there is a covariation relation between appropriate occurrences of the mental representation and the property. The problem is to specify which occurrences of the mental representation are supposed to be in this relation to the property. For example, the occurrence of the mental representation for WATER in the belief that there is no water around or in the desire for water need not track the property of being water. It is only applications of the mental representation that should track water. As I argue elsewhere, this notion is an intentional notion that, at least on the face of it, calls out for explication in terms of intentional mental states of the thinker, such as intentions, that covariation theories cannot appeal to. See Greenberg and Harman (2006: 310); and Greenberg (2007: 18–20). I waive this problem and use the notion of an application here because it offers the most straightforward way to characterize covariation theories. (Fodor’s (1990) asymmetric dependence theory is designed to do without the notion.)
that ARTHRITIS can apply only to a condition of joints, then the thinker who, at
the most basic level, takes arthritis to be not limited to the joints will have a mental
representation that does not covary with arthritis.

Natural-kind concepts provide good examples. Before we have the true theory of a
natural kind, we are likely to be disposed to apply a natural-kind concept of that kind
incorrectly. People were long disposed to apply the mental representation for STAR to
planets and other celestial objects and not to the sun. Even after sophisticated scientific
theories are developed, mistakes in the theories can result in dispositions to misapply
natural-kind concepts. For example, mistaken medical theories have often resulted
in dispositions to misapply concepts of diseases. Before the development of the true
theory, there is no basis for assuming that thinkers have a more basic disposition to
apply the concept correctly that is not manifested because of the interference of a
mistaken theory.

In the case of many natural-kind concepts, it is simply not plausible that thinkers
have a disposition to apply the concept to its instances that is not mediated by connec-
tions with other concepts. For such concepts, the most promising mechanism for lock-
ing onto the phenomenon is through the inferential dispositions that a conceptual-
role theorist takes to individuate a natural-kind concept—“natural-kind dispositions.”

Given various complications—for example, that putative exemplars typically instan-
tiate multiple natural kinds, that exemplars are often impure and some may even not
be instances of the relevant kind, that scientific investigation is often needed to
know which collections of items form natural kinds—the dispositions necessary to
determine a concept with the right reference turn out to be much more complex and
nuanced than is typically appreciated. Moreover, even if a thinker has the inferential
dispositions that, on a conceptual-role account, would be necessary to determine the
concept, it does not follow that the thinker has a disposition to apply the concept to its
instances. Finally, most importantly for present purposes, when a covariation theorist
claims that the covariation mechanism for a natural-kind concept comprises inferen-
tial dispositions of the sort that the conceptual-role theorist takes to be constitutive
of the concept, he is vulnerable to the same problem of incomplete understanding as
the conceptual-role theorist.

Thus far, I have been arguing that the kinds of examples that are widely believed to
create problems for conceptual-role theories—ones involving mistaken connections
between concepts—are also problematic for covariation theories. In addition, there
are examples that do not rely on stipulating mistaken connections between concepts.
Consider our peers who are normal adults and competent speakers of English. We
would not withdraw our attribution to one of them of a thought involving, say,
BEAUTY, SMILE, DEMOCRACY, SALTY, or ELLIPTICAL if it turned out that his

30 I think it is plausible that arthritis is a natural kind that may occur outside the joints. The example is
useful for expository purposes because it is well known, so I will set aside this complication.
31 On the relevant notion of determination, see footnote 7.
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or her disposition to apply the concept was slightly over- or under-inclusive. After all, how sure are we that people (including ourselves) have the appropriate application dispositions for the concepts that we attribute to them? For many kinds of dispositions, what disposition we have—exactly what its contours are—may be extremely difficult to ascertain. For example, the small differences in performance that would manifest the differences in underlying sensitivity may typically be swamped by errors that are the result of interfering factors. For all we know, many people may have "bent" application dispositions for simple everyday concepts.

It might be objected that covariation theories are often formulated in terms of a covariation relation between a mental representation and the world, rather than in terms of a thinker’s dispositions. That is, it is held that a mental representation represents a particular property just in case it reliably covaries with that property. For present purposes, however, there is no relevant difference between the disposition formulation and the covariation formulation. Indeed, Fodor characterizes having the appropriate nomological relation between a mental representation and a property as having a disposition: on his favored type of covariation theory, "having a concept is being locked to a property" and "being locked to a property is having a disposition" (1998a: 126).

I suggest that, despite their large surface differences, covariation theories and conceptual-role theories share a basic view—the Mastery View, as I will call it—about what it is for a representation to have a particular content. And this commonality is the source of the problem that incomplete understanding poses for both kinds of theories. The Mastery View makes a particular kind of disposition—intuitively, grasp or mastery of the concept—constitutive of having a concept. The relevant disposition is the one that would constitute an implicit understanding of what individuates the concept.

Evidently, different positions on concept individuation yield different positions on the relevant disposition. For example, suppose that concepts are individuated by canonical transitions between mental states, so that understanding what individuates a concept is understanding its canonical transitions. In that case, the disposition that constitutes an implicit understanding of what individuates the concept would be a disposition to make the canonical transitions. If, on the contrary, concepts are

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32 Indeed, Fodor characterizes having the appropriate nomological relation between a mental representation and a property as having a disposition: on his favored type of covariation theory, "having a concept is being locked to a property" and "being locked to a property is having a disposition" (1998a: 126).

33 For elaboration, see Greenberg (2007: §§ 5–6, 2005: 307–8).

34 The qualifications in footnote 9 are relevant to the points in this paragraph and the next.
individuated by what they refer to, understanding a concept is understanding what it refers to. In that case, the disposition that constitutes an implicit understanding of what individuates the concept would be a disposition to apply the concept to its instances. Thus, given their respective presuppositions about concept individuation, both conceptual-role and covariation theories take the same view about what it is for a representation to express a concept.

It will be convenient to generalize our use of the term *canonical disposition*. On the generalized usage, if a concept is individuated by certain canonical transitions, the concept’s canonical disposition is the disposition to make those transitions. If, on the other hand, a concept is individuated by the property it refers to, its canonical disposition is the disposition to apply a mental representation to instances of that property. In these terms, the Mastery View holds that having a concept is having its canonical disposition.

Given the nature of the Mastery View, it is to be expected that incomplete understanding poses a special problem for theories based on it. Mastery-based theories hold that having a concept is having a kind of fundamental competence with the concept. Such theories can account for ordinary error by appeal to a competence/performance distinction, but cases of incomplete understanding are precisely cases in which thinkers have thoughts involving a concept without having the relevant competence. To the extent that theorists of content address the phenomenon of incomplete understanding at all, they tend to assume that it can be accommodated by an appeal to other thinkers who fully grasp the relevant concept, or to the linguistic community generally. I turn now to this issue.

3 The appeal to deference

Philosophical appeals to deference or community are typically vague and underdeveloped. In order to evaluate the appeal to deference, we need to distinguish three different roles that deference could be taken to play, though these roles are not carefully distinguished in the literature. First, a theorist could argue that one who has a thought involving a concept of which he lacks mastery does not in fact have a thought with the same content as the thought of a thinker who has mastery of the concept. Rather, the thought involves a different “deferential” concept. (Call this the *deferential-concept account of the role of deference.*) So, for example, a thinker who lacks mastery of the concept ELECTRON does not have that concept, but some different concept. Perhaps the idea is that the thinker has a concept whose canonical

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35 A very different idea is that a thinker could “defer to the world.” For example, in the case of a natural kind concept, a thinker might implicitly take the concept to apply to whatever has the same underlying nature as certain paradigms, whatever that nature turns out to be. The dispositions that constitute such “deference to the world” are not a way of having a concept despite incomplete understanding of it; rather, they are part of what mastery of a natural kind concept plausibly requires.

dispositions include dispositions to defer to others’ use of the word “electron” (or their use of the concept ELECTRON). Or perhaps a concept such as WHAT THOSE SCIENTISTS MEAN BY “ELECTRON.”

Second, the theorist can argue that deference enables a thinker to come within the theorist's standard account of what it is to have a concept. On a Mastery-based theory, to have a concept is to have its canonical disposition. So the theorist could argue that deference to other people makes it the case that a thinker has a concept's canonical disposition.37 (The proposal is not that, over time, a thinker could, via deference, acquire self-standing mastery of the concept, but that deference could be a mechanism that mediates the canonical disposition in a thinker who has incomplete understanding of the concept.) Call this the mechanism account of the role of deference.

The third option is to argue that deference is a second, different way of having a thought involving a given concept. One can have a concept by having its canonical disposition. Or one can have a concept by deferring to other people—even though such deference does not enable one to have the concept's canonical disposition. Call an account that takes this option an alternative-way account of the role of deference.38

The first, deferential-concept option has many problems. For example, the natural understanding of “deferential concepts” is metalinguistic or meta-conceptual. But it is very plausible that the thinkers in question can have appropriate beliefs with entirely first-order contents. At any rate, I want to set aside the first option because it rejects the possibility of incomplete understanding, rather than accounts for it. It does not explain how a thinker who lacks mastery of a concept can have thoughts involving that very concept. Rather, it attributes to such a thinker a different concept for which he does have the canonical disposition. As my goal here is to show the incompatibility of Mastery-based theories with incomplete understanding, I set aside accounts that reject incomplete understanding.

By contrast, the second option—the mechanism account—would, if successful, allow incomplete understanding to be smoothly integrated into a theory's standard account of what it is to have a thought involving a given concept. Jerry Fodor (1994: 33–9; see also 1991: 285–6) is very explicit. Deference's role is not constitutive on this

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37 Dispositions are often taken to be intrinsic. In that case, a mechanism that involved other people could not be a mechanism of the required sort. As noted, however, conceptual-role (and other Mastery-based) theories could be reformulated replacing the notion of a disposition with a notion that does allow for an extrinsic mechanism. Fodor, for example, uses the notion of a law connecting the tokenings of a mental representation with a worldly property. For simplicity, I will continue to use the term "disposition."

38 On such a proposal, incomplete understanding obviously cannot be taken to be having a concept without having its canonical disposition; rather, for one to have incomplete understanding of a concept is to have the concept despite the fact that, without the mechanism of other people, one would lack its canonical disposition. I will generally set this complication aside.

39 One type of problem with all three options is that it is not true that, in all the relevant cases, there is someone with mastery of the concept in the community, and the thinker with incomplete understanding defers to that person with respect to the relevant concept. For example, in cases involving non-standard theories (see footnote 6), the thinkers in question will not be disposed to defer. Historical cases in which no one had mastery of the concept provide other illustrations. But I set this kind of problem aside here.
account; it is simply one mechanism that can underwrite the patterns of laws that, on his theory, make it the case that a representation has a particular content. As he puts it (Fodor 1994: 35): "From the point of view of an informational semantics, the situation is absolutely normal: that my elm and acid thoughts have the content that they do depends on there being mechanisms that reliably correlate them with instantiations of elmhood and acidhood respectively." “What philosophers call 'linguistic deference' is actually the use of experts as instruments" (1994: 36).

The problem with the second option is that it simply is not plausible that deference is a mechanism that would generally ensure that thinkers with incomplete understanding have a concept's canonical disposition. I have argued the point at length elsewhere (Greenberg 2001, 2007), but the basic point is straightforward. Deference is generally taken to be mediated linguistically. If the thinker notices that her use of the relevant word diverges from that of other speakers, she tends to revise her own use of the word and the concept to conform to theirs. If deference is to account for the wide range of cases that it is generally held to account for, such a revision tendency has to be sufficient for a thinker to count as deferring.40 (Indeed, in typical presentations of Burge-style examples of supposedly deference-dependent attitudes, all that is assumed is membership in a community and lack of an intention to depart from its conventions.)

The problem is that merely having a tendency to revise my usage when I become aware of divergence from that of others is far from sufficient for me to have a concept's canonical disposition. (The point is even more obvious if deference involves not a revision tendency, but merely, for example, an intention to use a word to mean whatever others use it to mean, or membership in a community and lack of an explicit intention to deviate.) To take the case of covariation theories, the fact that I would alter my behavior if I noticed that my use of a word diverges from yours, or if you corrected me, is not in general sufficient to make it the case that I now have your disposition to token a mental representation in a way that covaries with the relevant property in the world.41 It is not even sufficient to make it the case that I now have your disposition to use the relevant word.42

The third—alternative-way—account is probably the most common way of thinking of the role of deference. Theorists generally seem to assume that the cases in

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40 It is also plausible that, in order to have thoughts involving the relevant concept, the thinker must have some minimal understanding of the concept-word—for example, know what grammatical category it belongs to—and some minimal knowledge of what kind of thing it refers to. I will usually omit this point in what follows, as it will not affect the argument.

41 I make the point with respect to a covariation theory rather than a conceptual-role theory because a mechanism account of deference is more promising with respect to a covariation theory than a conceptual-role theory. (This is because it is more plausible that other people could provide a mechanism ensuring a connection between a mental representation and a worldly property than that they could provide a mechanism ensuring a connection between one's own mental representations.) The point in the text applies even more strongly with respect to conceptual-role theories.

42 For extensive discussion, see Greenberg (2001: § 6.5, 2007: § 7).
which thinkers have a concept’s canonical disposition are the central or primary cases for which a theory of content must account. Thus, the theorist can begin by offering a conceptual-role or covariation theory of content that addresses the primary cases. The theorist can then add a proviso that states that thinkers can also have thoughts involving the concept by deferring to others who have the concept’s canonical disposition.\footnote{Accounts that are neither conceptual-role theories nor covariation theories also take this route. See my discussion of Horwich (1998, 2005) in Chapter 6, “Troubles for Content II.”}

But a proviso that a thinker can have a thought involving a particular concept in virtue of his deferring with respect to the use of the concept or the concept-word is not a minor addendum to a theory committed to the view that to have a thought involving a particular concept is to exercise the concept’s canonical disposition. Rather, if a thinker can, by means of deference, have a thought involving a concept without having its canonical disposition, then it is false that what it is to have a concept is to have the concept’s canonical disposition. In other words, conceptual-role and covariation theories (before the addition of a proviso about deference) seem to offer an account of the nature of the phenomenon with which a theory of content is concerned—that of a representation’s having a particular concept or a thinker’s having a particular concept. I have suggested that, in fact, they offer the same core account—the Mastery View. Once we accept that a thinker can have a thought involving a particular concept without having the concept’s canonical disposition, the Mastery View is no longer a candidate for an account of the nature of the phenomenon.

Peacocke’s theory of content illustrates the point clearly. As set out in Section 2, Peacocke bases his theory of content—of what makes it the case that a thought involves a particular concept—on his account of concepts. According to that account, a concept’s fundamental identity condition consists of the condition for fully grasping or mastering it—its “possession condition.” The terminology is misleading because, at one point early on, he officially recognizes that possession conditions for concepts are not conditions for attribution of attitudes involving the concepts (1992: 29). He accepts that Burge has shown that thinkers with incomplete understanding of a concept can still be correctly attributed attitudes involving that concept. For this reason, Peacocke’s possession conditions, which state “what is required for full mastery of a particular concept” are different from “attribution conditions,” which state conditions that are sufficient for correctly attributing a thinker a thought involving a concept (1992: 29).\footnote{See also Peacocke (1992: 249 fn. 7) Rather than simply saying that attribution conditions for RED are the conditions under which someone has a belief involving that concept, Peacocke says that they are conditions for “an attribution of an attitude with a content containing the concept red” to be true. This formulation and a few other hints suggest some ambivalence on Peacocke’s part.} He does not attempt to give a theoretical account of the basis of “attribution conditions.” Instead, he simply proposes three conditions, centrally involving deference to another thinker’s use of a word, that he asserts are “jointly sufficient” for a
thinker to have a thought involving a particular concept. As Peacocke emphasizes, these conditions are much weaker than a possession condition; a thinker who does not satisfy a concept’s possession condition can satisfy the three conditions.

In this brief passage, Peacocke seems to concede that the Mastery View is false and, indeed, that satisfying a concept’s possession condition is not even a necessary condition for having the concept. He does not integrate the discussion into his theory, however. Through most of the book, he ignores the issue and treats his possession conditions as an account of what it is to have a concept.

In particular, in trying to show that his theory of content can account for various phenomena, he often relies on the assumption that thinkers have mastery of the concepts that figure in the contents of their thoughts. As explained above, Peacocke’s solution to Kripke’s rule-following problem depends on the assumption that thinkers have mastery of their concepts and does not address the issue of thoughts involving incompletely grasped concepts (Peacocke 1992: 133–45, 190–7). Similarly, Peacocke’s discussion of how the possession conditions of component concepts combine to determine what is required for a state to be a belief with a given content does not mention incomplete understanding and takes mastery of the component concepts for granted (1992: 106–15). Peacocke states, for instance, that the requirements derived by “multiplying out” the clauses of the possession conditions “state the (often counterfactual) relations in which a belief state must stand if it is to be the relevant belief” (1992: 111). But a belief will meet these requirements only if the thinker fully grasps the constituent concepts. Again, Peacocke’s treatments of Davidsonian radical interpretation and of Evans’s (1982: 100–5) “generality constraint” rely crucially on the assumption that thinkers who have attitudes involving a concept satisfy its possession condition (Peacocke 1992: 37–8, 41–5, 57).

I want to make three related points about Peacocke’s account. First, despite his awareness of the problem posed by incomplete understanding, he moves without argument from an account of concept mastery to an account of what it is to have a concept. Second, because his attempts to demonstrate the explanatory success of his theory of content rely on the assumption that thinkers have mastery of their concepts, those attempts do not provide support for the theory. Third, his recognition that thinkers can have thoughts involving a concept without satisfying its possession condition is inconsistent with his theory of content, which explains a thought’s involving a particular concept in terms of the thinker’s satisfying the concept’s possession condition. The upshot is that he lacks an account of what it is for a thinker to have a concept or for a representation to have a particular content.

45 He specifies the conditions for the concept red (Peacocke 1992: 29):

a. The subject is willing sincerely to assert some sentence of the form “___ red ___” containing the word “red” (or some translation of it).
b. He has some minimal knowledge of the kind of reference it has (e.g., that it is a color word).
c. He defers in his use of the word to members of his linguistic community.
This last problem is a very general one. A theory that holds that what it is for a thinker to have an arbitrary concept C is for the thinker to satisfy condition \( Q_C \) cannot consistently allow that there is an alternative way for a thinker to have C, one that does not require the thinker to satisfy \( Q_C \). To maintain that there is such an alternative way is to abandon the theory that what it is to have C is to satisfy \( Q_C \).

It has not been adequately recognized that the appeal to deference is an abandonment of a conceptual-role or covariation theory. Part of the problem is no doubt that theorists are often not clear about exactly what role deference is supposed to play. As discussed, one possibility is that deference is a mechanism that enables a thinker to have a concept's canonical disposition—the mechanism account of the role of deference. Once we recognize that the mechanism account is very implausible, it is clear that adding a proviso about deference is not a minor gloss on a conceptual-role or covariation theory of content. Rather, as noted above, it is an abandonment of such theories' central account of what it is for a representation to have particular content.

It is also worth noting that conceptual-role and covariation theories draw much of their plausibility from the intuitive attractiveness of the Mastery View. Once we have added another clause to account for deference, however, we have given up the idea that what it is to have a concept is to have its canonical disposition. It is therefore illegitimate for the new, two-part theory to trade on the appeal of that idea.

Moreover, once it is recognized that one can have a concept without having its canonical disposition, the possibility arises that deference may not be the only way to do so. As noted above, there are cases in which we would ordinarily attribute a concept to thinkers who lack the concept's canonical disposition, despite the fact that those thinkers do not defer to others who do have the relevant disposition. If Mastery-based theories were otherwise successful, that would provide some reason to dismiss such data. But once we have abandoned the idea that what it is for a thinker to have a concept is to have its canonical disposition, the theoretical pressure to reject the possibility of incomplete understanding without deference is removed.

Most importantly, if thinkers can have thoughts involving a concept without having its canonical disposition, Mastery-based theories, of both the conceptual-role and covariation varieties, cannot be true theories of what it is for a representation to have a particular content. In response, it might be suggested that a theory of content can have a less ambitious goal than saying what it is for a representation to have a particular content. It can specify the modal determinants of content (e.g., a (minimal) supervenience base) or, at least, what kinds of facts are among the modal determinants. Or, differently, it can specify the facts that content facts ontologically depend on—the facts that “ground” content facts, to use the currently popular term. On this line of thought, a deference clause simply adds an additional way in which a representation's having a particular content can be grounded. (I mostly focus on

\[46\] On this point, see Greenberg (2007: 61–2).

\[47\] See footnote 39.
grounding, but the arguments generally apply to modal determination as well.) In
some cases, a representation has content involving a particular concept in virtue of
the thinker’s exercising the concept’s canonical disposition; in other cases, it’s in virtue
of the thinker’s deferring to others who have that disposition.

I consider this suggestion in the companion Chapter 6, “Troubles for Content II:
Explaining Grounding” (Troubles II). I argue that a specification of different ways in
which a phenomenon P can be grounded raises an explanatory challenge, for it leaves
us without an understanding of why P can be grounded in these diverse ways. We
want to understand what P is such that the specified kinds of facts make it the case
that P facts obtain. To put the point the other way around, we want to understand
what the apparently diverse kinds of facts have in common such that they all ground
P facts. I argue that in general an account of the nature of a phenomenon can explain
its grounding. We therefore should not be satisfied with a specification of the different
ways in which content facts can be grounded, but should seek an account of what it is
for a representation to have particular content that could explain the diverse ways in
which the phenomenon is grounded.

In Troubles II, I canvass several possibilities. One is that a unified account of content
could explain what it is that thinkers who have a concept’s canonical disposition, on
the one hand, and thinkers who lack that canonical disposition but defer to others,
on the other hand, have in common in virtue of which the relevant representations
have the same content. In Troubles II, I give an illustration of a type of view that could
provide such a unifying account.

A second possibility is that the phenomenon of a representation’s having content is
fundamentally disjunctive. There is more than one way for a representation to have a
particular content because there is not in fact a single unified phenomenon of having
content.

A third possibility is that, although the phenomenon is unified, the phenomenon
is basic in the sense that we cannot give a complete account of its nature. A partial
account of the nature of a phenomenon may help to explain the different ways in
which it is grounded. But in the case of some phenomena, even this much will not be
possible.

As I discuss in Troubles II, these are three extremely different possibilities. Until we
know which is actual, the theory of content is in an unsatisfactory state. Is it possible
to give a unified account of content that could explain the diverse ways in which the
phenomenon is grounded? If not, why not? The obvious way to answer these questions
is to seek such a unified account.

4 Conclusion

Incomplete understanding is a much greater problem for many prominent theories
of content than is typically appreciated. It is often assumed that covariation theories
are immune to the problem of incomplete understanding—and, furthermore, that
apparent cases of incomplete understanding are in fact an important argument for
the view that concepts are individuated at the level of reference, and therefore for
covariation theories. I argued, however, that covariation theories are vulnerable to
a parallel problem, for thinkers can have a concept without having a disposition to
discriminate the relevant property. Indeed, I suggested that covariation theories, like
conceptual-role theories, are based on the Mastery View.

Once we distinguish genuine incomplete understanding from mere error, we see
that appeals to ideal conditions or a competence/performance distinction are no help
with respect to incomplete understanding. A proviso about deference to other people,
understood in the most promising way, is a specification of an alternative way in which
a representation’s having a given content can be determined or grounded, one that
is inconsistent with the central position of a conceptual-role or covariation theory.
Thus, if the phenomenon of incomplete understanding is real, conceptual-role and
covariation theories do not give us a viable account of what it is to have a concept or
what it is for a representation to have particular content. In the companion Chapter 6,
Troubles II, I turn to the suggestion that theories of content can have the more modest
goal of specifying modal determinants or, differently, grounds of content.48

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