

HOW TO BE DIRECT AND INNOCENT:  
A CRITICISM OF CRIMMINS AND PERRY'S THEORY  
OF ATTITUDE ASCRIPTIONS\*

INTRODUCTION

In several recent publications Mark Crimmins and John Perry have proposed an intriguing theory of propositional attitudes and propositional attitude ascriptions.<sup>1</sup> Crimmins and Perry maintain that their theory is to be preferred over other theories because it not only respects both

*The Doctrine of Direct Reference*: “the utterance of a simple sentence containing names or demonstratives normally expresses a “singular proposition” – a proposition which contains as constituents the individuals referred to, and not any descriptions of or conditions on them”. (Crimmins and Perry, 1989, p. 686)

and

*The Doctrine of Semantic Innocence*: “the utterances of the embedded sentences in belief reports express just the propositions they would if not embedded, and these propositions are contents of the ascribed beliefs”. (Crimmins and Perry, 1989, p. 686)

but it also, they claim, preserves the veracity of our untutored intuitions concerning the truth conditions of attitude ascriptions. I agree with Crimmins and Perry with regard to the desiderata of a theory of propositional attitudes and propositional attitude ascriptions: the doctrines of Direct Reference and Semantic Innocence are “well motivated by many considerations in the philosophy of language” (Crimmins and Perry, 1989, p. 687), and an adequate theory of propositional attitude ascriptions must accord with the judgments ordinary speakers make concerning the truth conditions, and *felicity* conditions, of occurrences of attitude ascriptions. (Thus I agree that the “Neo-Russellian” theories which deny the veracity

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<sup>1</sup> See Crimmins and Perry (1989) and Crimmins (1992).

of ordinary speakers' untutored intuitions are unacceptable.<sup>2</sup>) I do not agree, however, that Crimmins and Perry's theory succeeds in satisfying these desiderata. In this paper I show that Crimmins and Perry's theory does not accord with the judgments ordinary speakers make concerning the truth conditions and *felicity* conditions of occurrences of attitude ascriptions.

The paper proceeds as follows: In Section I the task for a theory of propositional attitudes and propositional attitude ascriptions is construed as that of obviating *the arguments from opacity*, and it is shown that there are two kinds of argument from opacity: *psychological* arguments from opacity, and *semantic* arguments from opacity. In Section II Crimmins and Perry's responses to the psychological and semantic arguments from opacity are explicated, and in Section III these responses are shown to be inadequate. Finally, in Section IV responses to the psychological and semantic arguments from opacity which satisfy the agreed upon desiderata are briefly described.

## I. THE NAIVE RUSSELLIAN THEORY AND THE ARGUMENTS FROM OPACITY

The primary task for a theory of propositional attitudes and propositional attitude ascriptions is to obviate *the arguments posed by the phenomenon of opacity*, and these arguments are best introduced as objections to *The Naive Russellian Theory*. In addition to the doctrines of Direct Reference and Semantic Innocence, The Naive Russellian Theory endorses the following three doctrines:

*The Doctrine of Full Articulation:* The semantic value of an occurrence of a declarative sentence, i.e. *the proposition* presented by an occurrence, is a function of (a) the *semantic values* – the referents and designations – of the phonetically or orthographically realized terms appearing in the occurrence, and (b) the logical form of the sentence.<sup>3</sup>

*The Doctrine of Propositional Truth:* The truth conditions of an occurrence of a declarative sentence are fully determined by the *proposition* presented by the occurrence; i.e. no two occurrences which present the same *proposition* have distinct truth conditions.

*The Doctrine of Semantic Competence:* Ordinary, competent, speakers are authoritative

<sup>2</sup> "Neo-Russellian" theories are endorsed in Salmon (1986), Soames (1987), Richard (1983), and elsewhere. I briefly discuss and criticize such theories in Section II.

<sup>3</sup> A *proposition* is thus the *semantic value* assigned to an occurrence of a declarative sentence by some *extensional* and, in some sense, *compositional* semantic theory. Thus, as I use 'proposition', it is not *definitive* of the *proposition* presented by an occurrence of a declarative sentence that it determine the judgments ordinary, competent, speakers make concerning the truth conditions of the occurrence.

concerning the truth conditions of occurrences of sentences of their own language; in ordinary circumstances, an occurrence of a declarative sentence has just the truth conditions that competent speakers judge it to have.<sup>4</sup>

(Note that these doctrines, taken together, entail a substantive *empirical* claim concerning the criteria ordinary speakers actually utilize in determining the truth conditions of occurrences of declarative sentences: Taken together these doctrines entail that if ordinary, competent, speakers judge of two occurrences that they have distinct truth conditions, then the occurrences must present distinct propositions.<sup>5</sup>) And finally, The Naive Russellian Theory endorses a binary analysis of propositional attitudes and propositional attitude verbs: propositional attitudes – the actual mental phenomena – are binary relations between agents and Russellian propositions and, furthermore, occurrences of propositional attitude verbs designate these binary relations.<sup>6</sup>

Though it is often alleged that The Naive Russellian Theory is refuted by arguments which are based upon the phenomenon of opacity, it is rarely noticed that there are two kinds of arguments from opacity: there are *psychological* arguments from opacity, and there are *semantic* arguments from opacity. *Psychological* arguments from opacity are concerned with the psychological component of The Naive Russellian Theory; they are directed against The Naive Russellian Theory's claim that Russellian propositions are the *contents* of propositional attitudes. (I use 'content' as a theory neutral term designating the *objects* of propositional attitudes; thus both Russellian propositions and Fregean *thoughts* are posited to serve as *contents*.) The *semantic* arguments from opacity, on the other hand, are concerned with the semantic component of The Naive Russellian theory; they are designed to show that The Naive Russellian Theory makes incorrect predictions concerning the truth conditions of occurrences of propositional attitude ascriptions. The conflation of these two kinds of argument is the source of much confusion, and, as will be made apparent

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<sup>4</sup> The Doctrine of Semantic Competence must be endorsed by any theorist who believes that Semantics is an empirical discipline whose purpose is to explain the semantic knowledge of ordinary speakers. If Semantics is understood to be such an empirical discipline, then ordinary, competent, speakers' judgments concerning the truth conditions of occurrences are *data* for the theory, and any semantic theory which is incompatible with this *data* is *ipso facto* false. In my view Semantics is such an empirical discipline.

<sup>5</sup> In taking pains to bring to light the substantive assumption encapsulated in these doctrines I am tipping my hand; in Section IV I propose that the Doctrine of Propositional Truth be rejected, and thus that the judgments of ordinary speakers concerning the truth conditions of an occurrence are *not* determined by the *proposition* presented by the occurrence.

<sup>6</sup> Some, but not all, *Russellian propositions* are *singular propositions*.

in Section IV, adequate responses to the arguments can be discerned only if the distinction between the two kinds of argument is maintained.

I will first state an example of a psychological argument from opacity. Suppose that in a context *c* a sincere, normal, understanding subject, say Odile, assents to an occurrence of

- (1) Twain is a great author.

yet dissents from an occurrence of

- (2) Clemens is a great author.

(I will call these occurrences ‘(O1)’ and ‘(O2)’, respectively.) Because The Naive Russellian Theory endorses the Doctrine of Direct Reference, it must maintain that the relevant tokens of ‘Twain’ and ‘Clemens’ express the same content, viz. Twain, the man. Consequently, since (O1) and (O2) contain (tokens of) the same predicate and have (or are instances of) the same logical form, The Naive Russellian Theory dictates that (O1) and (O2) express the same *content*, viz. the Russellian proposition containing Twain, the man, and the property of *being a great author* as constituents. Let us call this Russellian proposition, ‘*p*’. The psychological arguments assume the following two general principles:

*The Psychological Principle of Assent:* If a normal, sincere, understanding subject assents to an occurrence of a declarative sentence  $\Sigma$ , then he holds the attitude of belief toward the content expressed by that occurrence of  $\Sigma$ .

*The Psychological Principle of Dissent:* If a normal, sincere, understanding subject dissents from an occurrence of a declarative sentence  $\Sigma$ , then he does not hold the attitude of belief toward the content expressed by that occurrence of  $\Sigma$ . (Note that *dissenting from* an occurrence of a sentence is to be distinguished from *assenting to the negation of* an occurrence of a sentence.)

Thus it follows from The Psychological Principle of Assent that Odile holds the attitude of belief toward *p*. But it follows from The Psychological Principle of Dissent that Odile does not hold the attitude of belief toward *p*. Thus The Naive Russellian Theory, coupled with some plausible assumptions concerning what follows from Odile’s assenting and dissenting, leads to a contradiction. Therefore, the argument concludes, at least one of the tenets of The Naive Russellian Theory must be rejected.

The central difference between the psychological arguments and the semantic arguments concerns what follows from the subject’s assenting to

and dissenting from the relevant occurrences.<sup>7</sup> Whereas the psychological arguments presuppose the above psychological principles of assent and dissent, the semantic arguments from opacity presuppose the following *semantic* principles of assent and dissent:

*The Semantic Principle of Assent:* If a normal, sincere, understanding subject assents to an occurrence of a declarative sentence  $\Sigma$  in a context  $c$ , then an occurrence of 'N believes that  $\Sigma$ ', where N refers to the subject, is true in some context(s)  $c'$ .

*The Semantic Principle of Dissent:* If a normal, sincere, understanding subject dissents from an occurrence of a declarative sentence  $\Sigma$  in a context  $c$ , then an occurrence of 'N does not believe that  $\Sigma$ ', where N refers to the subject, is true in some context(s)  $c'$ . (Again, *dissenting* from an occurrence of a sentence is to be distinguished from *assenting to the negation* of an occurrence of a sentence.)

Assuming these principles, it follows from Odile's assent to (O1) in  $c$  that

(3) Odile believes that Twain is a great author.

is true in some context  $c'$ . Furthermore, Odile's dissent from (O2) in  $c$  implies that

(4n) Odile does not believe that Clemens is a great author.

is true in some context  $c''$ . Since, according to The Naive Russellian Theory, none of the expressions appearing in (4n) are (in a relevant way) context sensitive,<sup>8</sup> (4n) is true in  $c'$  if and only if (4n) is true in  $c''$ . So (4n) is also true in  $c'$ . The Naive Russellian Theory dictates, however, that for any context in which (3) is true,

(4) Odile believes that Clemens is a great author.

is also true. (If (3) presents proposition  $q$  in  $c$ , then, by the doctrines of Direct Reference, Semantic Innocence, and Full Articulation, (4) must also present  $q$  in  $c$ . And therefore, by the Doctrine of Propositional Truth, in  $c$  (3) and (4) must have the same truth conditions.) Consequently, since (3) is true in  $c'$ , it follows that (4) is true in  $c'$ . But (4) is simply the negation of (4n), and it was previously determined that (4n) is true in  $c'$ . Thus, (4) and (4n) are true relative to the same context. But a sentence and its negation cannot both be true relative to the same context, and

<sup>7</sup> It is possible to generate arguments from opacity based upon kinds of behavior other than assent to and dissent from occurrences of sentences; i.e. it is possible to formulate arguments from opacity which utilize principles which differ from the principles presented above. For the sake of simplicity, however, I will here be concerned only with arguments which utilize the above principles, though what I say concerning these arguments can be applied, *mutatis mutandis*, to arguments which utilize slightly different principles.

<sup>8</sup> This assumption is rejected by Richard, who maintains that propositional attitude verbs are indexicals. See Richard (1990).

consequently, the argument concludes, at least one of the tenets of The Naive Russellian Theory must be rejected.

## II. THE NEO-RUSSELLIAN THEORY AND CRIMMINS AND PERRY'S RESPONSES TO THE PSYCHOLOGICAL AND SEMANTIC ARGUMENTS FROM OPACITY

In order to obviate the semantic and psychological arguments from opacity, some of the doctrines and principles which serve as premises in the arguments must be rejected. Thus the debate between the "Fregeans," the "Neo-Russellians," and Crimmins and Perry can be construed as a debate concerning which of the doctrines and principles endorsed by The Naive Russellian Theory ought to be rejected. The Fregean response to these arguments is to posit *thoughts*, which are individuated much more finely than Russellian propositions, to serve as the *contents* of propositional attitudes and also as the semantic values – or *oblique referents* – of the that-clauses of attitude ascriptions.<sup>9</sup> Thus the Fregean theorist obviates the above psychological argument from opacity by denying that (O1) and (O2) express the same content, and the Fregean theorist obviates the above semantic argument from opacity by denying that occurrences of (3) and (4) present the same proposition. The Fregean response, however, violates the doctrines of Direct Reference and Semantic Innocence and therefore does not satisfy the agreed upon desiderata.

Contemporary Russellian theorists have endeavored to improve upon Fregean theories by finding a way of amending The Naive Russellian Theory so as to avoid refutation by the arguments from opacity, while still respecting the doctrines of Direct Reference and Semantic Innocence. To this end, Nathan Salmon, and others, have rejected The Naive Russellian Theory in favor of what I will call "The Neo-Russellian Theory."<sup>10</sup> The Neo-Russellian Theory differs from The Naive Russellian Theory in two fundamental ways: First, The Neo-Russellian Theory rejects the Doctrine of Semantic Competence; The Neo-Russellian Theory maintains that ordinary, competent, speakers are "systematically incorrect" concern-

<sup>9</sup> Frege identified *thoughts* with nonlinguistic abstract objects, but this is not an essential aspect of Frege's response to the arguments from opacity; i.e. it does not much matter whether Frege's *thoughts* are identified with platonic objects, mental states, "sentences of mentalese", sentences of mentalese coupled with their "cognitive roles", or even "Interpreted Logical Forms".

<sup>10</sup> I use Salmon's theory as a representative of all the Neo-Russellian theories.

ing the truth conditions of occurrences of attitude ascriptions.<sup>11</sup> And second, The Neo-Russellian theory rejects the binary analysis of propositional attitudes and instead analyzes propositional attitudes – the actual mental phenomena – as *ternary* relations between agents, Russellian propositions, and *modes of apprehending Russellian propositions*.<sup>12</sup> The attitude of belief, for instance, is analyzed in terms of the ternary BEL relation: Salmon maintains that Odile holds the attitude of belief toward the Russellian proposition that Twain is a great author just in case there is some mode of apprehending  $m$  such that BEL  $\langle$ Odile,  $p$ ,  $m$  $\rangle$  (where  $p$  is the Russellian proposition that Twain is a great author).

Analyzing propositional attitudes as ternary relations in this way provides Salmon *et al.* with a means for obviating the *psychological* arguments from opacity. The Neo-Russellian Theory claims that associated with (O1) and (O2) there are two modes of apprehension; in assenting to (O1), Odile apprehends the Russellian proposition that Twain is a great author via mode  $m$ , and in dissenting from (O2) she apprehends this same Russellian proposition via distinct mode  $m'$ . Therefore what follows from Odile's assent to (O1) and dissent from (O2) is not simply that Odile both holds and does not hold the binary relation of belief toward the same Russellian proposition, rather what follows from Odile's assent and dissent is that Odile holds the BEL relation toward the Russellian proposition  $p$  *via the mode in which it is presented by (O1)*, but does hold the BEL relation toward this proposition *via the mode in which it is presented by (O2)*. Thus, assuming that there are such appropriately individuated entities as modes of apprehension, The Neo-Russellian Theory is seemingly able to avoid the contradictory result that Odile both holds and does not hold the same binary relation toward the same Russellian proposition (at the same time).

The Neo-Russellian's response to the *psychological* arguments from opacity is thus very similar to the Fregean response. The Fregean theorist

<sup>11</sup> Salmon states that "Even when ordinary usage of a certain locution is systematic, it can be systematically incorrect – if, for example, the language is deficient in ways that compel speakers to violate its rules in order to convey what they intend, or if the principles and social conventions governing the appropriateness of certain utterances require certain systematic violation of the principles and rules governing correct and incorrect applications of the terms used. My claim is that ordinary usage with regard to such predicates as 'is aware that Clark Kent is Superman' and 'believes that Hesperus is Phosphorus' conflicts with their correct application in just this way" (Salmon, 1986, p. 84).

<sup>12</sup> The Neo-Russellian's *modes of apprehending Russellian propositions* are very similar to the Fregean theorist's *thoughts*, and thus there are just as many proposals as to what kind of entities they are: modes of apprehension may be mental states, expressions of mentalese, etc.

endeavors to preclude the contradictory conclusion of the psychological argument from opacity by positing *thoughts* and maintaining that (O1) and (O2) express distinct thoughts for Odile. Similarly, the Neo-Russellian endeavors to preclude the contradictory conclusion of the psychological argument from opacity by positing *modes of apprehending Russellian propositions*, and maintaining that (O1) and (O2) are associated with distinct modes of apprehension. If Fregean *thoughts* are identified with ordered pairs of Russellian propositions and *modes of apprehending* those propositions – and *Twin-Earth* considerations suggest that they ought to be so identified – then there is no significant difference between the two responses to the psychological arguments: the Fregean theorist maintains that the attitude of belief is a binary relation whose relata are agents and ordered pairs of very finely individuated mentalistic entities and Russellian propositions, while the Neo-Russellian theorist maintains that the attitude of belief – or, more precisely, the actual mental relation underlying the attitude of belief – is a ternary relation whose relata are agents, Russellian propositions, and very finely individuated mentalistic entities.

Because of this similarity between their responses to the psychological arguments, however, the Fregean theory and The Neo-Russellian Theory face the same general difficulty: If it is just *nomologically possible* that some normal subject assent to an occurrence of  $\Sigma(\alpha)$  yet dissent from an occurrence of  $\Sigma(\beta)$ , where according to The Neo-Russellian (or Fregean) theory the same *mode of apprehension* (or *thought*) is associated with both occurrences, then the Neo-Russellian (or Fregean) theory is itself refuted by psychological and semantic arguments from opacity. ( $\Sigma(\alpha)$  and  $\Sigma(\beta)$  are sentences which differ only in that  $\Sigma(\alpha)$  has referring term  $\alpha$  in that position where  $\Sigma(\beta)$  has coreferring term  $\beta$ .) For suppose that there is such a nomologically possible instance of opacity involving sentences  $S$  and  $S'$ , subject  $A$ , proposition  $p$  and mode of apprehension  $m$ . Then, according to The Neo-Russellian Theory's analysis of propositional attitudes, it would follow from  $A$ 's assent to  $S$  and a slightly amended Psychological Principle of Assent<sup>13</sup> that

<sup>13</sup> In order to run psychological arguments from opacity against the Neo-Russellian theory, the psychological principles of assent and dissent must be amended as follows:

*The Amended Psychological Principle of Assent:* If a normal, sincere, understanding subject  $x$  assents to an occurrence of a declarative sentence  $\Sigma$  which presents its content  $p$  via mode of apprehension  $m$ , then  $\text{BEL}(x, p, m)$ .

*The Amended Psychological Principle of Dissent:* If a normal, sincere, understanding subject  $x$  dissents from an occurrence of a declarative sentence  $\Sigma$  which presents its content  $p$  via mode of apprehension  $m$ , then  $\neg(\text{BEL}(x, p, m))$ .



(A) BEL⟨*A*, *p*, *m*⟩

But it would follow from *A*'s dissent from *S'* and a slightly amended Psychological Principle of Dissent that

(B)  $\neg$ (BEL⟨*A*, *p*, *m*⟩)

Thus if The Neo-Russellian Theory is to succeed in obviating the psychological arguments from opacity, the posited *thoughts* and/or *modes of apprehension* must be appropriately individuated: they must be individuated finely enough such that it is *nomologically impossible* for there to be a normal subject who assents to an occurrence of  $\Sigma(\alpha)$ , yet dissents from an occurrence of  $\Sigma(\beta)$ , where these occurrences are associated with the same *mode of apprehension*. (And similar remarks apply to Fregean theories.) It is not at all clear, however, that *there are* such appropriately individuated entities.<sup>14</sup>

The Neo-Russellian Theory's response to the *semantic* arguments from opacity, on the other hand, is not at all similar to the Fregean response. Because The Neo-Russellian Theory maintains the doctrines of Direct Reference, Semantic Innocence, and Full Articulation, the posited modes of apprehension cannot serve as *semantic values* of occurrences of attitude ascriptions; i.e. the relevant modes of apprehension cannot be the semantic values of any of the phonetically or orthographically realized terms or features of occurrences of attitude ascriptions. The Fregean theorist can allow *thoughts* to serve as the semantic values of that-clauses only because he does not maintain the Doctrine of Semantic Innocence: the Fregean theorist can maintain that the that-clauses of occurrences of (3) and (4) have distinct *thoughts* as semantic values, and thus that occurrences of (3) and (4) present distinct propositions, only because he denies that occurrences of (1) and (2) must express the same semantic value whether they occur inside or outside of that-clauses. The Neo-Russellian Theory, however, endeavors to preserve the doctrines of Direct Reference and Semantic Innocence, and consequently it must maintain that the that-clauses of occurrences of (3) and (4) have the same Russellian proposition as semantic value; there is no phonetically or orthographically realized term or phrase in occurrences of (3) or (4) which could be interpreted as having the relevant mode of apprehension as its semantic value. Consequently The Neo-Russellian Theory must maintain that occurrences of

<sup>14</sup> Salmon (1986) points out that the Fregean theory faces roughly this difficulty, though he does not notice that his own theory faces the same difficulty. Also, in Clapp (1994) I argue that there is no acceptable means of individuating these posited entities finely enough to obviate all *nomologically possible* arguments from opacity.

(3) and (4) present the same proposition, and thus, by the Doctrine of Propositional Truth, it must maintain that occurrences of (3) and (4) have the same truth conditions.

How then, does The Neo-Russellian Theory analyze attitude ascriptions? Because it maintains, first, the doctrines of Direct Reference and Semantic Innocence, and, second, the Doctrine of Full Articulation, The Neo-Russellian Theory cannot maintain that attitude ascriptions *specify* the relevant triples. For example, an occurrence of (4) cannot be analyzed as stating that the BEL relation is satisfied by the triple  $\langle \text{Odile}, p, m' \rangle$  (where  $m'$  is a particular mode of apprehending Russellian proposition  $p$ ) because there is no phonetically or orthographically realized term or feature in (4) which could be taken to have  $m'$  as its semantic value. Thus The Neo-Russellian Theory instead analyzes propositional attitude ascriptions as asserting that *existential generalizations* of the ternary BEL relation are satisfied; e.g. occurrences of (3) and (4) are analyzed as follows:

$$(3^* \ \& \ 4^*) \quad (\exists x)(\text{BEL}\langle \text{Odile}, p, x \rangle)$$

The Neo-Russellian Theory thus maintains that occurrences of (3) and (4) are true just in case there is some mode of apprehension or other such that Odile holds the BEL relation toward the Russellian proposition that Twain is a great author via this mode.<sup>15</sup> Of course this quantificational analysis of attitude ascriptions cannot preserve the veracity of our untutored intuitions concerning the truth conditions of ascriptions: Since Odile assents to (O1), it follows that there is *some* mode of apprehension such that she holds the BEL relation toward the Russellian proposition  $p$  via this mode, and consequently according to The Neo-Russellian Theory all occurrences of (4) are *true*. But this result is contrary to our untutored intuitions; we intuit that, because Odile dissents from (O2), in many contexts an occurrence of (4) is *false*. The Neo-Russellian Theory cannot preserve our untutored intuitions concerning the truth conditions of attitude ascriptions, and thus The Neo-Russellian Theory is forced to reject the Doctrine of Semantic Competence.

Proponents of The Neo-Russellian Theory are well aware that their theory does not obviate the semantic arguments from opacity, and is thus incompatible with our untutored semantic intuitions. Their response to this difficulty is to deny the veracity of our untutored intuitions, and reject the Semantic Principle of Dissent; they maintain that, despite Odile's

<sup>15</sup> The Neo-Russellian analysis can perhaps be more perspicuously represented utilizing lambda notation. The Neo-Russellian Theory maintains that occurrences of 'believes' designate the relation,  $\lambda x \lambda p [(\exists m)(\text{BEL}\langle x, p, m \rangle)]$ .

sincere dissent from (O2), *all* relevant occurrences of (4) are strictly speaking *true*, albeit *inappropriate*, *misleading*, and *infelicitous*. The proponents of The Neo-Russellian Theory maintain that our untutored intuitions go awry because we take *pragmatic information* which is pragmatically *imparted* by an occurrence to be *semantic information* which is *encoded* in the proposition presented by the occurrence.<sup>16</sup> That is, by the doctrines of Direct Reference, Semantic Innocence, and Full Articulation, occurrences of (3) and (4) present the same proposition; i.e. they *semantically encode the same information*. But the Doctrine of Propositional Truth dictates that it is this semantically encoded information *only* which determines the truth conditions of the occurrences; i.e. if a speaker judges occurrences of (3) and (4) to have distinct truth conditions, then he is confusing *pragmatically imparted* and *semantically encoded* information, and thus misapplies the correct criterion for determining the truth conditions of occurrences.

Crimmins and Perry are not satisfied with The Neo-Russellian Theory's response to the semantic arguments from opacity, and their theory is specially designed to obviate the semantic arguments from opacity while also preserving the veracity of our untutored intuitions concerning the truth conditions of attitude ascriptions. The Neo-Russellian Theory cannot preserve our untutored intuitions concerning attitude ascriptions because there are no phonetically or orthographically realized terms appearing in ascriptions which might be interpreted as referring to, and thus having as semantic values, the appropriate modes of apprehension. Since it endorses the Doctrine of Full Articulation, The Neo-Russellian Theory must maintain that all the constituents of the proposition presented by an occurrence are semantic values of such realized features or expressions. Consequently, The Neo-Russellian Theory cannot allow for the *specification* of the relevant modes of apprehension, and it is thus forced to resort to the quantificational analysis of attitude ascriptions. Crimmins and Perry's proposed solution to this problem is to deny the Doctrine of Full Articulation; they maintain that the proposition presented by an occurrence of an attitude ascription – and thus, by the Doctrine of Propositional Truth, the truth conditions of such an occurrence – need not be wholly determined by, (a) the semantic values of the phonetically or orthographically realized terms and features appearing in the occurrence, and (b) the logical form of the occurrence. By denying the Doctrine of Full Articulation, Crimmins and Perry allow for the possibility of modes of apprehension being *unarticu-*

<sup>16</sup> For a more detailed description of this account of our intuitions concerning the truth conditions of attitude ascriptions see Salmon (1986), p. 84.

*lated constituents* of the propositions presented by occurrences of attitude ascriptions. Consequently, the relevant triples can – in principle – be *specified* and Crimmins and Perry need not resort to the quantificational analysis of attitude ascriptions; Crimmins and Perry’s theory, unlike The Neo-Russellian Theory, at least has the resources to preserve the veracity of our intuitions concerning the truth conditions of attitude ascriptions.

It remains to be explained, however, how a constituent of a proposition can be specified by an occurrence if it is not the semantic value of an *explicit* – i.e. an orthographically or phonetically realized – feature or expression in the occurrence. How can Crimmins and Perry justify their denial of the Doctrine of Full Articulation? Crimmins and Perry claim that “it is very common in natural languages for a statement to exploit unarticulated constituents,” and they go on to claim that

We report the weather, for example, as if raining and snowing and sleeting and dark of night were properties of times, but they are one and all relations between times and places. If I say ‘it is raining,’ you understand me as claiming that it rains at that time at some place the context supplies, (Crimmins and Perry, 1989, p. 699).

Similar evidence for the presence of unarticulated constituents would seem to be provided by sentences containing relative predicates. Consider an occurrence of ‘Magic Johnson is tall’. The predicate ‘tall’ is a relative predicate; in order to know whether or not a particular occurrence of ‘Magic Johnson is tall’ is true, we must have some idea as to who or what Magic is alleged to be taller than. Does the occurrence state that Magic is tall *for a human*, tall *for a professional basketball player*, or what? But there is no *explicit* expression which has the appropriate comparison class as semantic value. Hence it seems that, just as with occurrences of ‘It’s raining’, the appropriate comparison class is (somehow) tacitly provided by the context of the occurrence: in some contexts the tacitly specified comparison class is the class of professional basketball players, and thus in these contexts the sentence asserts something like, *Magic Johnson is tall for a professional basketball player*. In these contexts the sentence is (probably) false, but in other contexts the specified comparison class is the class of humans, and in these contexts the sentence is (probably) true.<sup>17</sup>

Crimmins and Perry’s general strategy for responding to the semantic arguments from opacity is thus relatively straightforward: Crimmins and

<sup>17</sup> More evidence to support the rejection of the Doctrine of Full Articulation is offered in Crimmins (1992), pp. 15–21, and in Perry (1986). Crimmins allows for the possibility that the cognitive particulars which are *tacitly referred to* by an occurrence are the semantic values of *unvoiced syntactic items*, but he does not insist that there be such unvoiced syntactic items.

Perry's theory differs from The Neo-Russellian Theory in that Crimmins and Perry maintain that an occurrence of a simple propositional attitude ascription asserts that an agent holds an attitude toward a Russellian proposition via a particular, specified, mode of apprehension. The relevant mode of apprehension, however, is not the semantic value of an *explicit* feature or expression appearing in the occurrence, rather the relevant mode of apprehension is an *unarticulated constituent* which is provided, or *tacitly referred to*, by the occurrence as a whole. Though Crimmins and Perry's general strategy is relatively simple, the details of their theory are rather complex. The explication presented here will be concerned only with the essential features of the theory, and many interesting details will be ignored.<sup>18</sup>

Crimmins and Perry call the modes of apprehension posited by their theory *cognitive particulars*; some cognitive particulars are *beliefs*, some are *desires*, etc. Moreover, cognitive particulars have *structure*, and *content*. For example, *beliefs* are structured entities composed of *notions* and *ideas*, where *notions* are mental representations (tokens) of objects, and *ideas* are mental representations (tokens) of n-ary relations; in other words, the content of a *notion* is an individual object and the content of an *idea* is an n-ary relation. Furthermore, the content of a *belief* is determined compositionally from the content of its constituent *notions* and *ideas*: the content of a *belief* is the Russellian proposition determined by (a) the content of the *notions* and *ideas* which make up the *belief*, and (b) the structure of the *belief*.

Crimmins and Perry's theory does not differ from The Neo-Russellian Theory with regard to the psychological arguments from opacity. It was shown above, however, that if it is to succeed in obviating the psychological arguments from opacity, The Neo-Russellian Theory must individuate its posited *modes of apprehension* so finely that it is *nomologically impossible* for there to be a normal subject who assents to an occurrence of

<sup>18</sup> Much of what I omit concerns Crimmins and Perry's detailed account of how the content of a *belief*, *desire*, etc., is compositionally determined by its structure and the content of its constituent *notions* and *ideas*. I also overlook complexities which are required in order to account for ascriptions which are true in virtue of their subjects having so called *tacit beliefs*. According to the explication of Crimmins and Perry presented here, an ascription of the form 'N believes that  $\Sigma$ ' is true *iff* the person referred to by N actually has in his brain a *cognitive* particular which has the proposition presented by  $\Sigma$  as content. Thus those who think there is a principled distinction between *tacit beliefs* and other beliefs would object that this simplified version of Crimmins and Perry's theory cannot account for the intuitive truth of ascriptions such as 'Clinton believes that station wagons are inedible'. Crimmins' actual analysis of ascriptions does not suffer from this difficulty. See Crimmins (1992), chaps. 4 and 5.

$\Sigma(\alpha)$ , yet dissents from an occurrence of  $\Sigma(\beta)$ , where these occurrences are associated with the same *mode of apprehension*. For this reason Crimmins and Perry individuate their posited cognitive particulars so finely that they “cannot even in principle literally be shared” (Crimmins, 1992, p. 54); Crimmins and Perry’s posited modes of apprehension thus are literally *particulars* – physical mental representation *tokens*. Though Crimmins and Perry do not describe the individuation conditions for *beliefs*, *notions*, and *ideas* in any detail, Crimmins suggests that *notions* are to be individuated finely enough to account for the *phenomenon of recognition failure*:

When an agent perceives an individual and forms beliefs about the object of perception, she may or may not recognize the individual. If she recognizes it, she will connect the [“notion formed in perception”] with a pre-existing notion . . .

Failure of recognition involves having multiple notions of a single individual. When I do not recognize you at a distance, I do not connect the notion I form in perception with my stable notion of you. Many of the belief puzzle cases turn on just this phenomenon: an agent has two unconnected notions (often, both stable notions) that happen to be of the same individual. (Crimmins, 1992, p. 78)

This passage suggests the following familiar model of *recognition* and *recognition failure*: When an agent becomes occurrently aware of an entity – either directly by perceiving the entity, or indirectly by perceiving some token which represents the entity – there is some “way of thinking” of the entity which the agent utilizes in perception, i.e. the agent utilizes a “notion formed in perception” of the entity. The agent *recognizes* the entity just in case there is in the agent’s mind a pre-existing “stable” notion of the entity, and she realizes that this “notion formed in perception” and the pre-existing “stable” notion are notions *of* the same entity – she “connects” the two notions. The agent *fails to recognize* the entity just in case there is in the agent’s mind a pre-existing “stable” notion of the entity, but she does not realize that the “notion formed in perception” and the pre-existing “stable” notion are notions *of* the same entity. Recognition failure can also occur when an agent has two or more “stable” notions *of* an entity, yet she does not realize that these stable notions are notions of the same entity. For example, Odile may have two stable notions of Twain, e.g. a *Twain* “stable” notion and a *Clemens* “stable” notion, and she may not realize that these notions are notions *of* the same man; when Odile sees Twain, she may recognize the man she sees as *Twain*, but not recognize him as *Clemens*; i.e. she may “connect” the “notion formed in perception” with one of the pre-existing “stable” notions, but not the other.<sup>19</sup>

<sup>19</sup> Note that the model presupposes that an agent cannot fail to recognize one of her own notions; Crimmins and Perry’s *notions*, like Fregean *senses*, and *sense data*, are *epistemologi-*

Thus, under this model of recognition failure, if it is in the relevant sense *possible* for Odile to fail to recognize Twain on a given occasion, then Odile must have at least two distinct *notions* of Twain involved in her current thinking.<sup>20</sup> This criterion for the individuation of *notions* implies that many factors may be sufficient for the individuation of *notions* (and presumably for the individuation of *ideas* as well). For instance, Odile, may have one “stable” *notion* of Twain which she associates with the name ‘Twain’, and a distinct “stable” *notion* she associates with the name ‘Clemens’. She also may have a perceptual *auditory notion* of Twain which is associated with the sound of his voice, and perhaps a perceptual *visual notion* which derives from a particular sighting of Twain. Crimmins and Perry also suggest that *notions* may also be individuated by appeal to their “circumstances of origin” (Crimmins and Perry, 1989, p. 695); e.g. Odile may have one *notion* which originated from her reading *Huckleberry Finn* and distinct *notion* which originated from her reading *Tom Sawyer*. And finally, Crimmins suggests that Odile may have a *normal notion* of Twain, a *notion* which is associated with a set of stereotypical beliefs about Twain; a *normal notion* of Twain may be a *notion* which combines in *beliefs* with *ideas* of properties such as *being a great author*, *being dead*, and *being witty* (Crimmins 1992, pp. 158–9). (In order to have a “normal *notion*”, one must have all of the requisite kinds of *beliefs*; e.g. assuming that the above is what is required to have a *normal notion* of Twain, if Odile did not have a *belief* whose content was the Russellian proposition that Twain is witty, then she would not possess a *normal notion* of Twain.)

How do these very finely individuated *cognitive particulars* enter into the propositions presented by occurrences of attitude ascriptions? Crimmins and Perry maintain that an occurrence of

- (3) Odile believes that Twain is a great author.

presents the proposition that Odile has a *belief* – a cognitive particular – which has as its content the Russellian proposition that Twain is a great author, and furthermore that this *belief* has as constituents a particular

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*cally transparent* to the agents who entertain them. One might wonder, however, how it is that one can, at times, fail to “connect” two notions with the same content, or mistakenly “connect” two notions with distinct contents, yet never fail to recognize a notion.

<sup>20</sup> It is difficult to make precise the relevant sense of *possible*, but the justification for the claim is easily discerned: Assuming Crimmins’ model of recognition failure, the following modal claims are true (or there are obvious interpretations under which they are true): (i) If on a given occasion Odile does *not* have two distinct *notions* of Twain, then Odile *cannot* fail to recognize Twain on that occasion. (ii) If on a given occasion Odile does have two distinct *notions* of Twain, then Odile *might* fail to recognize Twain on that occasion. The occurrence of ‘*might*’ in (ii) expresses the relevant sense of *possible*.

*notion*, and a particular *idea* (or perhaps several *ideas*), arranged in a particular structure. The context of the occurrence determines which particular *belief*, *notion*, and *idea* are tacitly referred to by the occurrence. For example, an occurrence of (3) might be analyzed as presenting the proposition that Odile has a *belief*, with content  $p$ , and her *belief* is appropriately composed of  $N_t$  and  $I_{ga}$ , where  $N_t$  is a particular *notion* which has Twain as its content –  $N_t$  is Odile’s “‘Twain’ mode of being acquainted with Twain” – and  $I_{ga}$  is a particular *idea* which has the property of *being a great author* as its content. Slightly more formally, Crimmins and Perry’s analysis of an occurrence of (3) can be characterized as follows:

$$(3^{**}) \quad (\exists b)(\text{BEL}\langle \text{Odile}, p, b \rangle \ \& \ \text{Con}(b)=p \ \& \ b \text{ is appropriately composed of } N_t \text{ and } I_{ga})$$

(where  $\text{Con}(\ )$  is a function from *beliefs* to their contents). And their analysis of an occurrence of (4) can be characterized as

$$(4^{**}) \quad (\exists b)(\text{BEL}\langle \text{Odile}, p, b \rangle \ \& \ \text{Con}(b)=p \ \& \ b \text{ is appropriately composed of } N_c \text{ and } I_{ga})$$

(where  $N_c$  is a *notion* of Twain which is distinct from  $N_t$  –  $N_c$  is “Odile’s ‘Clemens’ mode of being acquainted with Twain”). Thus according to Crimmins and Perry, the occurrence of (3) asserts that Odile holds the BEL relation toward the Russellian proposition that Twain is a great author via a *belief* which contains  $N_t$  as a constituent. The occurrence of (4) on the other hand, asserts that Odile holds the BEL relation toward the Russellian proposition that Twain is a great author via a *belief* which contains  $N_c$  as a constituent, and  $N_c$  is not identical to  $N_t$ . Consequently, since (3\*\*) and (4\*\*) present distinct propositions, Crimmins and Perry can – in keeping with the Doctrine of Propositional Truth – allow that the occurrence of (3) is true, while the occurrence of (4) is false. Thus Crimmins and Perry’s theory, unlike The Neo-Russellian Theory, can at least in principle obviate the semantic arguments from opacity and preserve the veracity of our untutored intuitions concerning the truth conditions of attitude ascriptions.

### III. CRITICISM OF CRIMMINS AND PERRY’S RESPONSES TO THE ARGUMENTS FROM OPACITY

Crimmins and Perry’s responses to the psychological and semantic arguments from opacity are inadequate. In this section I will show, first, that though Crimmins and Perry succeed in obviating the psychological



arguments from opacity, they do so at the cost of rendering their analysis of propositional attitudes *ad hoc*. And, second, I will show that Crimmins and Perry's response to the semantic arguments is inadequate because their theory of attitude ascriptions is seriously flawed.

Crimmins and Perry's theory and The Neo-Russellian Theory employ the same strategy for responding to the psychological arguments from opacity. In the previous section it was shown that The Neo-Russellian Theory succeeds in obviating the psychological arguments from opacity only if it can individuate its posited modes of apprehension finely enough such that it is nomologically impossible for there to be a normal understanding subject who assents to an occurrence of  $\Sigma(\alpha)$ , yet dissents from an occurrence of  $\Sigma(\beta)$ , where according to The Neo-Russellian Theory both of these occurrences present the same Russellian proposition and are associated with the same mode of apprehension. Since Crimmins and Perry's theory utilizes the same strategy for responding to the psychological arguments from opacity as The Neo-Russellian Theory, they must also individuate their posited modes of apprehension this finely. That is, Crimmins and Perry must individuate *beliefs* (and *desires*, etc.) so finely that it is *nomologically impossible* for there to be a normal understanding subject who assents to an occurrence of  $\Sigma(\alpha)$ , yet dissents from an occurrence of  $\Sigma(\beta)$ , where according to the Crimmins and Perry's theory both of these occurrences present the same Russellian proposition and are associated with the same *belief*.

Though they would not put it in these terms, Crimmins and Perry are well aware that in order to obviate the psychological arguments from opacity, the modes of apprehension posited by their theory must be individuated extremely finely.<sup>21</sup> Their response to this difficulty is to individuate

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<sup>21</sup> Crimmins construes *modes of apprehension* as *belief states*, and he argues that there is no acceptable way of individuating *belief states* – where *belief states* are *universals* – such that there cannot be either (i) cases in which the ternary BEL relation seems to both hold and not hold of the same triple of agent, Russellian proposition, and *belief state*, or (ii) cases in which a subject intuitively has two distinct beliefs, yet *belief states* are not individuated finely enough to reflect this intuitive difference in beliefs. Note, however, that if there is a nomologically possible case of type (ii), then there is a nomologically possible case of type (i). For example, if we have a case in which, intuitively, Tom believes that Cicero was a famous orator, and that Tully is a great orator, though he is skeptical concerning the identity of Cicero and Tully, then there is a similar case in which, intuitively, Tom believes that Cicero is a famous orator, though he seems *not* to believe that Tully is a famous orator.

Also note that the issue here concerns a proper analysis of *propositional attitudes* and not proposition attitude *ascriptions*. Crimmins and Perry are not saying that modes of apprehension cannot be universals because, e.g., universals cannot serve as semantic values of attitude ascriptions. Rather they maintain that no analysis of *propositional attitudes* which identifies modes of apprehension with universals can succeed in obviating the *psychological* arguments from opacity.

their posited entities so finely that they “cannot even in principle literally be shared” (Crimmins, 1992, p. 54). The reason that Crimmins and Perry posit *cognitive particulars*, as opposed to some kind of *universal* entity – a state, property, or type – is that they believe this to be the only acceptable way in which the posited entities can be individuated finely enough; i.e. they believe that any acceptable account of *modes of apprehension* which identifies these posited entities with some kind of universal will not be able to individuate them finely enough to obviate the arguments from opacity. Thus Crimmins and Perry maintain that modes of apprehension must be identified with particulars because there is *no* kind of universal  $U$  such that, for all subjects  $x$  and propositions  $p$ ,  $x$  holds the attitude of belief toward  $p$  iff  $\text{BEL}\langle x, p, u \rangle$  (where  $u$  is a universal of kind  $U$ ).<sup>22</sup>

The motivation for identifying modes of apprehension with *particulars*, rather than universals or types, is that doing so ensures that Crimmins and Perry’s theory cannot be refuted by psychological arguments from opacity. However, by identifying modes of apprehension with *cognitive particulars* rather than universals Crimmins and Perry render their analysis of propositional attitudes *ad hoc*. Consider the following obviously *ad hoc* proposal for obviating the psychological arguments from opacity: Let us identify modes of apprehension with natural numbers (or blades of grass, grains of sand, etc.); thus under this *ad hoc* proposal, belief is a ternary relation whose relata are agents, Russellian propositions, and natural numbers. The only constraint is that the numbers invoked to serve as modes of apprehension are to account for the *phenomenon of recognition failure*; i.e. wherever Crimmins and Perry would invoke distinct cognitive particulars, this proposal will instead invoke distinct numbers. This proposal succeeds in obviating the psychological arguments from opacity as follows: What follows from Odile’s assent to (O1) is that

(C)  $\text{BEL}\langle \text{Odile}, p, n \rangle$

(where  $n$  is a natural number). And what follows from Odile’s dissent from (O2) is that

(D)  $\neg(\text{BEL}\langle \text{Odile}, p, n' \rangle)$ .

(where  $n'$  is a distinct number). Since  $n \neq n'$ , (C) and (D) are not contradictions, and the contradiction is avoided. This *ad hoc* proposal, because

<sup>22</sup> Crimmins characterizes modes of apprehension – which he calls “belief states” – as “shareable universals that classify agents’ *internal contributions* to instances of believing”. And Crimmins maintains that “for any natural way of individuating [modes of apprehension] so construed, they cannot, along with agents, times, and propositions, serve to individuate instances of believing” (Crimmins, 1992, p. 42).

it is isomorphic with Crimmins and Perry's proposal, succeeds in obviating all nomologically possible arguments from opacity.

The problem with the above proposal is that it is *ad hoc*. As Crimmins himself points out, an acceptable relational analysis of a phenomenon should "posit a relation whose argument roles reflect a complete set of individuating parameters that includes all [and only] those parameters *central* to the phenomenon" (Crimmins, 1992, p. 38). The problem with the above account is that there is no reason to suppose that numbers play any *central* role in the phenomenon of belief. After all, numbers are wholly irrelevant to Odile's behavior and the other mental states she instantiates, and surely what is *central* to the phenomenon of belief is that what one believes systematically affects one's behavior and one's other mental states; i.e. what is *central* to the phenomenon of belief is one's functional organization. But if this broadly functionalist view is even roughly correct, then there is no reason to prefer Crimmins and Perry's analysis of the phenomenon over the above *ad hoc* analysis. For the actual cognitive particulars in Odile's brain are no more relevant to Odile's functional organization than are the numbers invoked by the *ad hoc* proposal; Odile could have had the very same functional organization – the very same dispositions to assent, dissent, etc. – instantiated via any number of different cognitive particulars. So why is Crimmins and Perry's theory to be preferred over the above *ad hoc* proposal?

The obvious response is for Crimmins and Perry to maintain that their theory is to be preferred over the above *ad hoc* proposal, and thus is not itself *ad hoc*, on the grounds that cognitive particulars, but not numbers, can instantiate functionally relevant causally efficacious *properties*; thus cognitive particulars are relevant to the phenomenon of belief because they instantiate causally efficacious properties which partially determine one's functional organization. This response is intimated by Crimmins in several passages, including the following:

... adopting the strategy of taking *beliefs* to be particulars opens the question of just which particulars they are (which is not answered by pointing out that they might have been many different kinds of particulars). The sort of answer I envision is the familiar functionalist schema . . . : what is special to *beliefs* is a matter of their *causal powers* amid other cognitive particulars, states, faculties, and events. *Beliefs* are the things that have *belief-ish* causal powers, no doubt including characteristic effects on theoretical and practical reasoning. (Crimmins, 1992, p. 55, my italics)

Crimmins and Perry, however, cannot maintain that their theory is to be preferred over the above *ad hoc* theory because cognitive particulars instantiate appropriate causally efficacious properties: appealing to such

causally efficacious properties is tantamount to conceding that cognitive particulars are not *central* to the phenomenon of belief after all.

Suppose that Odile holds the attitude of belief toward the Russellian proposition that Twain is a great author via a certain cognitive particular, *belief*<sub>1</sub>. And suppose that the effects this belief has on Odile's behavior and her other mental states is due, in part, to some complex causal property *P* which is instantiated by *belief*<sub>1</sub>; i.e. it is *in virtue of P* that *belief*<sub>1</sub> has the "*belief-ish* causal powers" that it has and plays the *functional role* that it plays. Thus, as Crimmins hints in the above citation, Odile's behavior and mental processes would *not differ in any way* if she had *belief*<sub>2</sub> instead of *belief*<sub>1</sub>, so long as *belief*<sub>2</sub> also instantiated *P*. But if this is so, then what reason could there be for supposing that it is *belief*<sub>1</sub>, rather than *P*, which is *central* to Odile's belief? More generally, if *there are* causally efficacious properties such as *P* which account for the functional relevance of cognitive particulars, then contrary to what is maintained by Crimmins and Perry, propositional attitudes *can* be analyzed as ternary relations between agents, Russellian propositions, and a kind of universal, viz. properties such as *P*. Moreover, if *there are* causally efficacious properties such as *P* which account for the relevance of cognitive particulars to an agent's functional organization, then it is these complex properties, and *not* cognitive particulars themselves, which are *central* to the phenomenon of belief. Thus Crimmins and Perry *cannot* maintain that their theory is to be preferred over the above *ad hoc* theory on the grounds that cognitive particulars, but not numbers, can instantiate explanatorily relevant properties; to do so is to concede that cognitive particulars are not *central* to the phenomenon of belief after all.<sup>23</sup>

Crimmins and Perry are thus faced with something of a dilemma: On one horn, there are the psychological arguments from opacity. To obviate these arguments Crimmins and Perry endorse the ternary of analysis of propositional attitudes, and individuate modes of apprehension very finely by identifying them with cognitive particulars. On the other horn there is the challenge of providing a non *ad hoc* analysis of propositional attitudes, an analysis which "posit[s] a relation whose argument roles reflect a com-

<sup>23</sup> To put the point in Crimmins' terminology (Crimmins, 1992, p. 37), Crimmins and Perry individuate "instances of believing" too finely because there are no potential "co-possible instances of believing" involving the same proposition, time, and agent (with one functional organization), which are intuitively *two* "instances of believing"; i.e. if potential "instances of believing" *x* and *y* involve the same proposition, time, and agent (with one functional organization), then *x* and *y* are the very same "instance of believing", regardless of the cognitive particulars involved in *x* and *y*. Therefore there is no reason for the *additional* requirement that *x* and *y* involve the same cognitive particulars.

plete set of individuating parameters that includes all [and only] those parameters *central* to the phenomenon” (Crimmins, 1992, p. 38). Crimmins and Perry maintain that the only way to avoid the first horn is to identify their posited modes of apprehension with *particulars* of some kind. But this lands Crimmins and Perry on the second horn: if *beliefs* – cognitive particulars – have their functionally relevant causal powers in virtue of having complex properties such as *P*, then *beliefs* are not *central* to the phenomenon of belief: What is *central* to the phenomenon of belief is that one’s beliefs systematically affect one’s mental processes and behavior. But if these effects are due to certain causally efficacious properties, which could be instantiated in any number of *particulars*, then it is the properties and *not* the particulars which are *central* to the phenomenon.

I now turn to Crimmins and Perry’s response to the semantic arguments from opacity. I will show that their response to the semantic arguments from opacity is inadequate because their theory of attitude ascriptions suffers from two serious flaws: First, it is incorrect to analyze occurrences of ordinary attitude ascriptions as *tacitly referring to* anything like *modes of apprehension*; in making ordinary attitude ascriptions ordinary speakers are not “tacitly referring” to modes of apprehension, regardless of whether *modes of apprehension* are identified with *cognitive particulars* or universals of some kind – in making ordinary attitude ascriptions, ordinary speakers are simply not doing what Crimmins and Perry say they are doing. And, second, even if it is granted that attitude ascriptions can be analyzed as tacitly referring to *modes of apprehension* of some sort, Crimmins and Perry’s theory fails to preserve our intuitions concerning the truth conditions, and *felicity conditions*, of attitude ascriptions.

Consider, again, an occurrence of the sentence ‘It’s raining’. Suppose I look out my window and utter this sentence – I’m just telling you in an offhand way that it is raining. What proposition have I presented? According to Crimmins and Perry “you understand me as claiming that it rains at that time at some place the context supplies.” But precisely *which place* is tacitly referred to by my utterance? Can any of the following candidates plausibly be identified as the proposition presented by my utterance as a whole?

- (a) Rains  $\langle t, \text{the place I looked at} \rangle$
- (b) Rains  $\langle t, \text{my block} \rangle$
- (c) Rains  $\langle t, \text{Cambridge} \rangle$
- (d) Rains  $\langle t, \text{the greater Boston area} \rangle$

Note that (a)–(d) all have different truth conditions; it can be raining on

my block, even though it is not raining at the place I looked. Therefore, assuming that this list exhausts the plausible candidates (though it clearly does not), only one of (a)–(d) can be the proposition I presented. But *which one* of (a)–(d) have I presented? This question clearly has a false presupposition. In uttering ‘It’s raining’, I intended to present (a) no more, and no less, than I intended to present any of (b)–(d). But if I had no such intention, then I did not present (a) any more, nor any less, than I presented any of (b)–(d). Therefore, none of (a)–(d) is a correct analysis of what I have said.

Crimmins and Perry cannot avoid this problem by maintaining that my utterance of ‘It’s raining’ refers to a *vague place*. For even if I do tacitly refer to a vague place, the question remains: *Which* vague place have I tacitly referred to? Perhaps I tacitly referred to the vague place *around the area outside my window*, or perhaps I tacitly referred to the vague place *around the general Cambridge area*, or perhaps *around the greater Boston area*, etc. Again it can be raining around the area outside my window, and not be raining around the general Cambridge area, but I intend to refer to the vague place *around the area outside my window*, no more, and no less, than I intend to refer to the vague place *around the general Cambridge area*. At this point it might be suggested that, though Crimmins and Perry are correct in maintaining that a (vague) place is tacitly referred to by my utterance, it is *indeterminate* as to which (vague) place is tacitly referred to, because my intentions do not determine a unique (perhaps vague) place. But, first, it is not that my intentions to refer to a (perhaps vague) place are not detailed enough to determine a *unique* place and thus my “tacit reference” is split between a number of (perhaps vague) places; rather I simply lack the relevant kind of intention – I am not even *trying* to tacitly refer to some (perhaps vague) place(s). (This is not to deny that my utterance is true only if it is raining in the *relevant* or *salient* place(s).<sup>24</sup>) Moreover, utterances which are referentially *indeterminate* in this way are infelicitous, but my utterance of ‘It’s raining’ is perfectly felicitous even though I lack the intention to refer to some

<sup>24</sup> If the Doctrine of Propositional Truth is endorsed, then the fact that my utterance is true only if it is raining in the relevant places seems to imply that my utterance somehow *refers to*, or *designates*, the relevant place(s). But why should the Doctrine of Propositional Truth be *assumed*? Let us take the logical form of ‘It’s raining’ to be

$$\exists e (\text{Raining}(e))$$

(i.e. “there is an event which is a raining”). Why not maintain that *my particular utterance* of ‘It’s raining’ is true only if there is a raining event which satisfies additional conditions, though these additional conditions are not *referred to* or *designated* by *my utterance*? Is it not enough that the additional conditions are “provided by the context”?

(perhaps vague) place(s). And, second, invoking some kind of indeterminacy is incompatible with Crimmins and Perry's analysis of my utterance: Crimmins states that utterances of 'It's raining' "are *about* particular places" (Crimmins, 1992, p. 150).<sup>25</sup>

Crimmins and Perry's theory of attitude ascriptions suffers from a similar problem. Consider an occurrence of the ascription

- (5) She believes that Clinton is a great leader.

where 'she' refers to Odile. (Suppose that we are at a political rally at which Clinton is giving a speech. We are observing Odile, whom we do not know, and Odile seems to be enjoying Clinton's speech.) What proposition do I present by my utterance of (5)? What proposition I present depends upon what *notion* I am tacitly referring to. But what *notion* am I tacitly referring to? Again, consider some plausible candidates: Perhaps my utterance tacitly refers to the *notion* associated with Odile's current visual perception of Clinton; this is the perceptual *notion* Odile would be employing if she were deaf, or simply were not listening. Or perhaps my utterance tacitly refers to the *notion* associated with Odile's current audio perception of Clinton; this is the perceptual *notion* Odile would be employing if she were blind, or simply were not watching. Or perhaps my utterance tacitly refers to the *notion* involved in Odile's *belief* that Clinton is the former Governor of Arkansas; this is the *notion* Odile would have if she, for some reason, did not think that former Governor Clinton was the President. Or perhaps my utterance tacitly refers to the *normal notion* involved in stereotypical beliefs about Clinton; this is the *notion* Odile would have if she knew, among other things, that Governor Clinton won the presidential election. Or perhaps my utterance tacitly refers to the aggregate of all the *notions* thus far described, or perhaps just the aggregate of the first two *notions* described. Just as with the above case involving 'It's raining', I intended to refer to, e.g., Odile's *visual notion* of Clinton no more, and no less, than I intended to refer to any of the other above described *notions*. But if I had no such intention, then I did not tacitly refer to Odile's *visual notion* of Clinton any more, nor

<sup>25</sup> Even if invoking vague referents or "referential indeterminacy" were effective and plausible options in the case involving my utterance of 'It's raining', these options are not available to Crimmins and Perry in cases of attitude ascriptions. For example, consider Kripke's (1979) famous Paderewski case. Suppose that an occurrence of 'Peter believes that Paderewski is a great pianist' is intuitively *false*. If Crimmins and Perry's theory of attitude ascriptions is to preserve the veracity of our intuitions, then the occurrence cannot tacitly refer to a *notion* so *vague* that it applies to both Peter's *pianist notions* of Paderewski, and his *statesman notions* of Paderewski. Nor can it be *indeterminate* as to which of these *notions* the occurrence tacitly refers.

any less, than I tacitly referred to any of the other above described *notions*.<sup>26</sup> Therefore, it would be incorrect to analyze my utterance of (5) as tacitly referring to any one of these *notions*.<sup>27</sup>

Crimmins and Perry have a potential response to this objection. They could maintain that some occurrences of ascriptions do not *tacitly refer to* the *notions* and *ideas* employed by the subject of the ascriptions, but instead merely tacitly designate *constraints* upon the *notions* and *ideas* employed by the subject.<sup>28</sup> More specifically, Crimmins and Perry could maintain that the correct analysis of my utterance of (5) is

$$(5^*) \quad (\exists b)[(\text{BEL}(\text{Odile}, q, b) \ \& \ \text{Con}(b) = q \ \& \\ (\exists n)(\text{C}(n) \ \& \ b \text{ is appropriately composed of } n \text{ and } I_{\text{gl}})]$$

where  $\text{C}(\ )$  is some condition, or *constraint*, on Odile's *notion* of Clinton. For example,  $\text{C}(\ )$  might be the constraint *is Odile's normal notion of Clinton, regardless of whether or not she believes that former Governor Clinton is President Clinton*, or it might be the constraint *is Odile's current perceptual notion of Clinton, regardless of whether or not it is an audio notion, or a visual notion*, or  $\text{C}(\ )$  could be the very inclusive constraint *is the notion of Clinton Odile is currently employing, regardless of what kind of notion it is, etc.* By analyzing my utterance of (5) in this way, Crimmins and Perry could avoid the difficulty presented above; (5\*) does not require that I *tacitly refer to a specific notion* Odile has of Clinton,

<sup>26</sup> These problems multiply when one considers occurrences of ascriptions such as 'Odile believes that it is raining'. Crimmins and Perry must maintain that in uttering such an ascription the speaker (first?) tacitly refers to a particular place, and (then?) tacitly refers to one of Odile's *notions* of that place. Surely this is too much to believe!

<sup>27</sup> Note that I am not claiming that there are no such things as *notions*, nor am I claiming that we are too "epistemologically distant" to refer to them. It is at least plausible that there are "cognitive particulars" such as *beliefs*, and that these entities are composed of entities like *notions* and *ideas*. And it even seems plausible that we can, when we have the appropriate intention, refer to these entities. For example, it seems plausible to suppose that the token of 'that' in an utterance of 'that is Quine's normal *notion* of Clinton' could refer to Quine's normal *notion* of Clinton, if he has one. All I am claiming is that it is incorrect to interpret *ordinary speakers* uttering *ordinary attitude ascriptions* as "tacitly referring" to anything like particular *notions* and *ideas*.

<sup>28</sup> In Crimmins and Perry (1989) it is suggested that the constraint analysis could be invoked in response to my first objection. In Crimmins (1992), however, Crimmins maintains that all affirmative ascriptions at least attempt to refer to *notions*, though some negated ascriptions merely tacitly designate constraints on *notions*. Crimmins eschews the constraint analysis because he thinks it is implausible to suppose that specific constraints are tacitly designated, or "provided", by occurrences (Crimmins, 1992, pp. 168–9). I of course agree with Crimmins on this point. But why does Crimmins find it any more plausible to suppose that *specific notions* are *tacitly referred to* by occurrences?



rather (5\*) requires that I merely tacitly designate a certain *constraint* on Odile's *notion* of Clinton.

Reverting to the constraint analysis of attitude ascriptions, however, merely relocates the problem. Just as I do not tacitly refer to Odile's *visual notion* of Clinton any more, nor any less, than I tacitly refer to her *audio notion* of Clinton, so I do not tacitly designate the constraint *is Odile's normal notion of Clinton* any more, nor any less, than I tacitly designate the constraint *is Odile's current perceptual notion of Clinton*. Therefore, none of the suggested interpretations of (5\*) can be a correct analysis of what I have said.<sup>29</sup>

My second objection to Crimmins and Perry's theory of attitude ascriptions is that, despite what is claimed, Crimmins and Perry's theory does not accord with our untutored intuitions concerning the truth conditions of attitude ascriptions. More specifically, I will show that under Crimmins and Perry's *tacit reference* analysis of attitude ascriptions, their theory makes incorrect predictions concerning ascriptions which, according to the *tacit reference* analysis, suffer from *tacit reference failure*. But if Crimmins and Perry invoke the *constraint analysis* in order to solve this problem, then their theory fails to obviate the semantic arguments from opacity. Thus neither the *tacit reference analysis* nor the *constraint analysis*, succeeds in preserving the veracity of our untutored intuitions concerning the truth conditions of attitude ascriptions.

If in making ordinary attitude ascriptions ordinary speakers are at least attempting to *tacitly refer* to *notions* and *ideas*, then there ought to be cases of *tacit reference failure*: there ought to be occurrences of attitude ascriptions which attempt to tacitly refer to *notions* which do not exist; such an occurrence should of course lack a truth value, as the referential presupposition of the occurrence has not been fulfilled. But these predictions do not accord with our untutored intuitions concerning the truth conditions of attitude ascriptions. For example, Crimmins and Perry's theory makes incorrect predictions with regard to ascriptions, and negated ascriptions, which concern propositional contents that are wholly unknown by the subject.<sup>30</sup> For example, consider occurrences of

<sup>29</sup> Schiffer (1992) makes a point quite similar to this. Schiffer argues that what I call Crimmins and Perry's *constraint* analysis suffers from "the meaning-intention problem". Schiffer does not consider what I call the *tacit reference* analysis of attitude ascriptions, though he *endorses* the *tacit reference* analysis of 'It's raining'. I maintain that all of these "hidden indexical" analyses are incorrect because they suffer from "the meaning-intention problem". Thus I maintain that Schiffer's position is *unstable*: If the *constraint* analysis of attitude ascriptions is to be rejected because of the "meaning intention problem", then the *tacit reference* analysis of 'It's raining' also ought to be rejected because of the "meaning intention problem".

<sup>30</sup> Fregean theories suffer from very similar problems.

(6) Aristotle believed that Twain was a great author  
and

(6n) Aristotle did not believe that Twain was a great author.

Our untutored intuitions dictate that occurrences of (6) are *false*, while occurrences of (6n) are *true*; Aristotle could not possibly have believed that Twain was a great author, as the proposition presented by ‘Twain was a great author’ was wholly unknown to Aristotle. Crimmins and Perry’s theory, however, predicts that occurrences of (6) and (6n) would suffer from reference failure, and thus would be neither true nor false. If it is assumed that a speaker who uttered an occurrence of (6) would be attempting to tacitly refer to one of Aristotle’s *notions* of Twain, then Crimmins and Perry would analyze the occurrence as follows:

(6\*)  $(\exists b)(\text{BEL}(\text{Aristotle}, p, b) \ \& \ \text{Con}(b) = p \ \& \ b \text{ is appropriately composed of } N_t \text{ and } I_{ga})$

(where  $N_t$  is Aristotle’s alleged *notion* of Twain). The problem is that ‘ $N_t$ ’ lacks a referent – Aristotle could not possibly have had a *notion* of Twain – and thus Crimmins and Perry’s theory incorrectly predicts that an occurrence of (6) would be neither true nor false. (A similar argument applies to occurrences of (6n).)

Crimmins and Perry’s theory also has difficulty with more familiar sounding ascriptions and negated ascriptions. To borrow an example from Crimmins (1992), suppose we come upon a man who seems to be gazing up at the Washington Monument. Unbeknownst to me, however, the man is blind. Upon seeing the man, I utter

(7) That yokel believes it’s the tallest thing in the world.

Crimmins claims that my utterance attempts to tacitly refer to the yokel’s *current visual notion* of the Washington Monument. Consequently, since the yokel has no such *notion*, Crimmins and Perry’s theory predicts that – regardless of the yokel’s opinions concerning the height of the Washington Monument – my utterance lacks a truth value. But, again, this prediction is incorrect; the fact that the man has no *current visual notion* of the Washington Monument is irrelevant to the truth conditions of my utterance. Consider what the truth conditions of my utterance would be in each of the following situations:

*Situation 1:* Also unbeknownst to me, moments before I uttered (7) the yokel sincerely uttered, “It’s so good to be here, under the shadow of the tallest thing in the world”. (Suppose that he

utters this because his dishonest tour guide told him that the Washington Monument is the tallest thing in the world.)

*Situation 2:* Unbeknownst to me, moments before I uttered (7) the yokel sincerely uttered, “It’s so good to be here, under the shadow of the second tallest thing in the world”. (Suppose that his tour guide told him a different lie.)

Our intuitions dictate that if situation 1 were the actual state of the world, my utterance of (7) would be *true*, not neither true nor false. Granted, I am confused. I am wrong in thinking that the exhibited gazing behavior has something to do with the yokel’s belief, and thus my *justification* for thinking that the yokel believes it’s the tallest thing in the world is undermined, but these epistemological issues should not be confused with the issue of the *truth conditions* of my utterance. What one says can be true even if one thinks that it is true for the wrong reasons. Similarly, our intuitions dictate that if Situation 2 were the actual state of the world, my utterance would be *false*. In this case I would be under the same confusion; I misinterpret the exhibited gazing behavior, and my justification for thinking that the yokel believes it’s the tallest thing in the world is undermined. But, again, this confusion concerning the *justification* of my claim does not affect the *truth conditions* of my claim. Thus Crimmins and Perry’s theory seems to make incorrect predictions for even quite ordinary ascriptions.<sup>31</sup>

Crimmins and Perry could attempt to avoid this problem of *tacit reference failure* by again invoking the *constraint analysis* of ascriptions. They can claim, for example, that an occurrence of (6) – which we would intuitively judge to be false – would not *tacitly refer* to Aristotle’s *notion* of Twain, but rather would present a proposition containing a *constraint* upon Aristotle’s alleged *notion* of Twain. For instance, an intuitively false occurrence of (6) might be analyzed as follows:

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<sup>31</sup> Of course similar arguments would apply if I uttered

(7n) That yokel does *not* believe that it’s the tallest thing in the world.

More specifically, we intuit that occurrences of (7n) would be *false*, rather than neither true nor false, in Situation 1, and *true*, rather than neither true nor false, in Situation 2.

I find Crimmins’ treatment of these difficulties very puzzling. He assumes, without argument, that in either Situation 1, or in Situation 2, an occurrence of (7) would lack a truth value. And then he goes on to argue that in either Situation 1 or in Situation 2 an occurrence of (7n) would be *true*, because, despite appearances, the negation presented by the occurrence is a wide-scope, *it is not the case that*, negation. I do not understand what is motivating Crimmins here: Why is Crimmins willing to abandon our intuitions concerning occurrences of (7), but not occurrences of (7n)?

$$(6^{**}) \quad (\exists b)[(\text{BEL}\langle \text{Aristotle}, p, b \rangle \& \text{Con}(b) = p \& \\ (\exists n)(C(n) \& b \text{ is appropriately composed of } n \text{ and } I_{ga})]$$

(where  $C(\ )$  is some constraint on Aristotle's alleged *notion* of Twain – for example,  $C(\ )$  might be the constraint, *is a notion of Twain*). There is no “empty” term in (6\*\*), and thus (6\*\*) accords with our intuitions that an occurrence of (6) would be *false*. This strategy could also be employed to preserve our intuitions concerning my utterance of (7), and other alleged cases of tacit reference failure. There is, however, a serious problem with invoking to the constraint analysis to avoid the difficulties posed by occurrences which allegedly suffer from tacit reference failure: In reverting to the constraint analysis, Crimmins and Perry's theory becomes vulnerable to arguments similar to the semantic arguments from opacity; i.e. in appealing to the constraint analysis Crimmins and Perry's theory becomes susceptible to the very kind of difficulty the theory was designed to avoid.<sup>32</sup>

Consider again Crimmins' case involving the Washington Monument and the yokel. Our untutored intuitions dictate that, if Situation 1 is the

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<sup>32</sup> Another problem is that there is no way of determining whether a given ascription merely invokes a *constraint on notions*, or if it attempts to *tacitly refer* to the particular *notions* employed by the subject. It is clear from the above that, if it is to preserve our untutored intuitions concerning attitude ascriptions, Crimmins and Perry's theory must analyze at least some occurrences of ascriptions as tacitly designating constraints on *notions*, as opposed to tacitly referring to *notions*. But how is it determined whether a given occurrence of an ascription attempts to tacitly refer to a *notion*, or merely tacitly designates a constraint on *notions*? Crimmins and Perry recommend the following procedure:

look at what would happen if the appropriate notions were to fail to exist. If the report would then be false, then it is a case of notion constraint rather than [tacit reference to a notion]: if the report would fail to make a claim, then it is a case of (attempted) [tacit reference to a notion]. (Crimmins and Perry, 1989, p. 705).

This statement of the procedure, however, will not do. The basic idea behind the recommended determination procedure is that in cases in which reference to *notions* does not seem relevant to the *truth conditions* of the ascription, then the ascription merely tacitly designates a constraint on *notions*; it does not matter whether we judge the given ascription to be true, or judge it to be false. But even if the procedure is appropriately amended to solve this problem, it will still fail to determine whether a given ascription tacitly refers to *notions*, or merely tacitly designates a constraint on *notions*. The problem is that for most occurrences of ascriptions it is not all clear what “the appropriate notions” are. Consider again the case in which we are observing Odile at the political rally. When I utter ‘She believes that Clinton is a great leader’ what are the “appropriate notions”? Does my claim concern Odile's perceptual *notions*, her *normal notions*, or what? As was pointed out above, there seems to be no answer to this question. But without an answer to this question, the proposition presented by my utterance, and thus its truth conditions, cannot be determined by Crimmins and Perry's theory.

actual state of the world, my utterance of (7) is *true*; if the yokel had moments before sincerely uttered, “It’s so good to be here, under the shadow of the tallest thing in the world”, then my utterance of (7) is true. In order to preserve this intuition, my utterance of (7) must be interpreted as invoking a constraint which is satisfied by one of the yokel’s *notions* of the Washington Monument. What constraint is invoked by my utterance? That is, what is  $C(\ )$  in the following analysis of my utterance?

$$(7^*) \quad (\exists b)[(\text{BEL}(\text{the yokel}, r, b) \ \& \ \text{Con}(b) = r \ \& \\ (\exists n)(C(n) \ \& \ b \text{ is appropriately composed of } n \text{ and } I_{tt})]$$

(where  $r$  is the Russellian proposition that the Washington Monument is the tallest thing in the world, and  $I_{tt}$  is the yokel’s *idea of being the tallest thing in the world*). Crimmins informs us that my utterance attempts to say something about a *visual notion* the yokel has of the Washington Monument. But if  $C(\ )$  is identified with the constraint, *is a visual notion of the Washington Monument*, then analysis (7\*) incorrectly predicts that my utterance of (7), relative to Situation 1, is *false*. It was stipulated that the yokel is blind, and thus he has no *visual notions* whatsoever. Therefore if we are to preserve our intuition that relative to situation 1 my utterance of (7) is true,  $C(\ )$  must be more inclusive than is *a visual notion of the Washington Monument*.

We might try interpreting  $C(\ )$  in (7\*) as the more inclusive constraint, *is a perceptual notion of the Washington Monument*, but this will not do either. Suppose that in Situation I the yokel has no direct perceptual contact with the Monument whatsoever. That is, suppose that the actual state of the world relative to which I utter (7) is as follows:

*Situation 1'*: Unbeknownst to me, moments before I uttered (7) the yokel sincerely uttered, “It’s so good to be here, under the shadow of the tallest thing in the world”. He utters this because his tour guide lied to him, and he has had no direct perceptual contact with the monument whatsoever.

Our intuitions dictate that relative to Situation 1', my utterance of (7) is *true*. But if  $C(\ )$  in (7\*) is interpreted as designating the constraint *is a perceptual notion of the Washington Monument*, then the proposition expressed by (7\*) is again false, and thus (7\*) cannot serve as an adequate analysis of my utterance of (7).

Similarly, interpreting  $C(\ )$  in (7\*) as the constraint, *is a normal notion of the Washington Monument*, will not suffice; again, we can just stipulate into Situation 1 that the yokel lacks the requisite stereotypical beliefs about the Washington Monument:

*Situation 1'*: Unbeknownst to me, moments before I uttered (7) the yokel sincerely uttered, "It's so good to be here, under the shadow of the tallest thing in the world". He utters this because his tour guide lied to him, and he does not possess the *beliefs* required for having a *normal notion* of the Washington Monument.

If C( ) in (7\*) is interpreted as *is a normal notion of the Washington Monument*, then the proposition expressed by (7\*) is again *false*, and thus (7\*) still cannot serve as an analysis of my utterance of (7).

Even interpreting C( ) in (7\*) as something as inclusive as the constraint, *is a notion of the Washington Monument which is a constituent in the yokel's occurrent belief that he is standing under that tall thing*, (where 'that tall thing' refers to the Washington Monument) will not do. Again, situation 1 can merely be stipulated to be such that we intuit that my utterance of (7) would be *true* relative to situation 1, though the analysis (7\*) would be false:

*Situation 1'''*: Unbeknownst to me, moments before I uttered (7) the yokel sincerely uttered, "The Washington Monument is the tallest thing in the world". He utters this because his friend lied to him. But he does not know that he is standing under the Washington monument – he is not even aware of *that tall thing* – though his mental disposition is such that if his surroundings were described to him, he would sincerely declare, "I am beside the Washington Monument, which is the tallest thing in the world".

Our untutored intuitions dictate that if I were to utter (7) relative to Situation 1''', then my utterance would be *true*; if the yokel moments ago sincerely declared that the Washington monument is the tallest thing in the world, and I utter (7), plainly referring to the salient Washington monument, then my utterance of (7) is true. The analysis depicted by (7\*), however, where C( ) is interpreted as the constraint, *is a notion of the Washington Monument which is a constituent in the yokel's occurrent belief that he is standing under that tall thing*, (where 'that tall thing' refers to the Washington Monument), would be *false* (or perhaps neither true nor false) relative to Situation 1''', as in this situation the yokel has no occurrent belief that he is standing under *that tall thing*.

The difficulty manifesting itself here arises because our intuitions dictate that as long as the yokel is disposed to utter sincerely sentences such as, 'The Washington Monument is the tallest thing in the world', my utterance

of (7) is true; the facts concerning *how* the yokel is *epistemologically related* to the Washington Monument are irrelevant to the truth conditions of my utterance. Consequently, if the analysis depicted by (7\*) is to preserve these intuitions, C( ) in (7\*) must be interpreted so that no matter what *notion* the yokel employs in his *belief* that the Washington Monument is the tallest thing in the world – no matter how the yokel is *epistemologically related* to the Washington Monument – this *notion* satisfies C( ). As a result, C( ) must be interpreted as an extremely inclusive constraint.

The problem is that if C( ) is allowed to be an extremely inclusive constraint, then Crimmins and Perry's theory becomes susceptible to difficulties similar to the semantic arguments from opacity. Suppose that C( ) is the very inclusive constraint, *is a notion of the Washington Monument*. Further suppose that the actual state of the world is as follows:

*Situation 3:* The yokel, for whatever reason, thinks that there are *two* Washington Monuments, one of which is the tallest thing in the world. (Thus there is some *notion* of the Washington Monument which is a constituent of a *belief* that has Russellian proposition *r* as its content. Let us call this *notion*, 'N<sub>tm</sub>'.) Furthermore, let us suppose that the yokel thinks the monument he is standing next to when I utter (7) is not the tall monument, but rather is the shorter monument. (Thus there is another *notion* of the Washington Monument which is not a constituent of a *belief* that has Russellian proposition *r* as its content. Let us call this *notion*, 'N<sub>sm</sub>'.) Lastly, the yokel has only moments ago sincerely dissented from an occurrence of 'It's the tallest thing in the world', where the occurrence of 'it' referred to the monument the yokel is standing under.

Our untutored intuitions dictate that, if Situation 3 were to obtain, my utterance of

(7) That yokel believes that it's the tallest thing in the world.

relative to Situation 3 would be *false*, while my utterance of

(7n) That yokel does *not* believe that it's the tallest thing in the world.

relative to Situation 3 would be *true*. (Note that, if necessary, further stipulations can be added to Situation 3 to solidify these intuitions.) Crimmins and Perry, however, would analyze my utterances of (7) and (7n) as follows:

(7\*)  $(\exists b)[(\text{BEL}\langle \text{the yokel}, r, b \rangle \ \& \ \text{Con}(b) = r \ \& \ (\exists n)(C(n) \ \& \ b \text{ is appropriately composed of } n \text{ and } I_{tt})]$

(7n\*)  $\neg(\exists b)[(\text{BEL}\langle \text{the yokel}, r, b \rangle \ \& \ \text{Con}(b) = r \ \& \ (\exists n)(C(n) \ \& \ b \text{ is appropriately composed of } n \text{ and } I_{tt})]$

(where  $C(\ )$  in (7\*) and (7n\*) is the very inclusive constraint, *is a notion of the Washington Monument*).

These analyses incorrectly predict that my utterance of (7) relative to Situation 3 is *true*, while my utterance of (7n) relative to Situation 3 is *false*. The constraint *is a notion of the Washington Monument* is so inclusive that it is satisfied by both  $N_{tm}$  and  $N_{sm}$ . Consequently, relative to Situation 3 (7\*) is true – there is *some notion* of the Washington Monument, viz.  $N_{tm}$ , which is a constituent of a *belief* of the yokel's which has proposition  $r$  as its content. And for similar reasons (7n\*), relative to Situation 3, is false. Thus (7\*) and (7n\*) do not accord with our untutored intuitions concerning the occurrences of (7) and (7n), respectively.<sup>33</sup>

#### IV. HOW TO BE NAIVE AND INNOCENT: A SKETCH OF THE APPROPRIATE RESPONSES TO THE PSYCHOLOGICAL AND SEMANTIC ARGUMENTS FROM OPACITY

The fundamental difficulty with Crimmins and Perry's theory is that the entities posited to obviate the psychological and semantic arguments from opacity cannot serve as the semantic values of ordinary attitude ascriptions; in making ordinary attitude ascriptions, speakers simply are not referring – neither tacitly nor explicitly – to *cognitive particulars, thoughts*,

<sup>33</sup> Crimmins and Perry's theory is susceptible to arguments very similar to the semantic arguments from opacity because in suggesting that attitude ascriptions merely tacitly designate *constraints on notions* as opposed to *specifying notions*, Crimmins and Perry endorse a version of the Neo-Russellian's *existential* analysis of attitude ascriptions: The Neo-Russellian Theory maintains that an occurrence of (7) is to be analyzed as stating that there is some mode of apprehension or other  $m$  such that the ternary BEL relation is satisfied by the ordered triple consisting of the yokel, Russellian proposition  $r$ , and  $m$ . Crimmins and Perry's *constraint* analysis of attitude ascriptions merely adds one unhelpful wrinkle to the Neo-Russellian analysis: Under Crimmins and Perry's *constraint* analysis, an occurrence of (7) states that there is some mode of apprehension or other  $m$ , where  $C(m)$ , and the ternary BEL relation is satisfied by the ordered triple consisting of the yokel, Russellian proposition  $r$ , and  $m$ . Hence it is not surprising that Crimmins and Perry's *constraint* analysis, like The Neo-Russellian Theory, cannot preserve the veracity of our untutored intuitions.



or any other kind of esoteric mental entity.<sup>34</sup> The moral to be drawn is that the appropriate general strategy for responding to the psychological and semantic arguments from opacity is *not* to posit some kind of finely individuated esoteric entities to individuate the *contents* of propositional attitudes, and then claim that these entities are somehow referred to by occurrences of attitude ascriptions. In this final section I will briefly describe a radically different general strategy for responding to the psychological and semantic arguments from opacity.

The appropriate response to the psychological arguments from opacity is *not* to gerrymander the analysis of propositional attitudes so that one of their relata is some kind of very finely individuated mentalistic entity. Belief and the other propositional attitudes are what they appear to be: binary relations whose relata are agents and conceivable states of the world. (I have been assuming that these conceivable states of the world are Russellian propositions, but, for my purposes here, they could also be identified with *sets of possible worlds*, or *situations*, etc.) Of course if one holds the attitude of belief toward a certain Russellian proposition, then one holds the attitude in a *way*, or *via a mode*; it is a platitude that everything that happens, happens in a *way*. But just because John's kissing Mary happens in a way, it does not follow that *kissing* is to be analyzed as a ternary relation, or the existential generalization of a ternary relation, whose relata are kissers, kissees, and *modes of kissing*. Moreover, in order for John to kiss Mary, certain complex physiological conditions must be met by John: he must be endowed with "tokens" of whatever physiological mechanisms enable one to kiss. But it does not follow that *kissing* is to be analyzed as a ternary relation which holds between kissers, kissees, and complex physiological states – or *physiological particulars* – which enable him to kiss. The only motivation there is for denying The Naive Russellian Theory's intuitively correct *binary* analysis of propositional attitudes is that, *if the requisite assumptions are granted*, then the Naive Russellian Theory can be refuted by the psychological arguments from opacity. But this suggests that the appropriate response to the psychological arguments from opacity is *not* to gerrymander The Naive Russellian Theory's binary analysis of propositional attitudes, but rather to reject one of the requisite assumptions.

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<sup>34</sup> It is widely recognized that Fregean theories are unacceptable for this reason. This sort of objection against Fregean theories is developed in detail in Chapter 2 of Clapp (1994). Similar objections to Frege's theory are raised in Scheffler (1955), Salmon (1986), and Richard (1990), though neither Salmon nor Richard notices that their own theories are prey to very similar objections. Forbes, who endorses a kind of Fregean theory, attempts to solve some of these difficulties in Forbes (1990).

The appropriate response to the psychological arguments from opacity is to reject the Psychological Principle of Dissent. If the Psychological Principle of Dissent is rejected, then it does not follow from Odile's dissent from (O2) that she does not hold the attitude of belief toward the Russellian proposition that Twain – the man – is a great author. Moreover, this principle is dubious for independent reasons. Why should it follow from Odile's understanding dissent from (O2) that Odile does not hold the attitude of belief toward Russellian proposition presented by (O2)? Suppose that Odile manifests every kind of behavior characteristic of believing that Twain is a great author, except assenting to (O2): suppose that Odile buys Twain's books, argues that he was the best author, visits Hannibal MO., etc., but, for whatever reasons, she dissents from (O2). If belief is a binary relation between agents and something like Russellian propositions, then surely in this situation Odile *does* hold the attitude of belief toward the Russellian proposition that Twain – the man – is a great author, despite her dissent from (O2). (Of course it is likely that if Odile dissents from (O2), then she does not believe that (O2) is true, but this meta-linguistic proposition is not identical to the Russellian proposition presented by (O2).)<sup>35</sup>

What about the semantic arguments from opacity? Once the distinction between the psychological and semantic arguments from opacity is appreciated, it becomes apparent that rejecting the Psychological Principle of Dissent is perfectly compatible with maintaining the Semantic Principle of Dissent: It is perfectly compatible with the above sketched response to the psychological arguments from opacity to maintain that for *many* contexts *c*,

- (3) Odile believes that Twain is a great author.

is true in *c*, while

- (4) Odile believes that Clemens is a great author.

<sup>35</sup> One might object that my response to the psychological arguments abandons some of our intuitions concerning propositional attitudes: One might object, first, that ordinary people intuit that Odile can hold the attitude of belief toward the proposition that Twain is a great author, and not hold the attitude of belief toward the proposition that Clemens is a great author. In reply, I doubt that people have any such *psychological intuition*, though of course ordinary people do have *semantic intuitions*, intuitions concerning the truth conditions of attitude ascriptions. Moreover, it is not clear how relevant such intuitions would be to theoretical investigations in psychology and the philosophy of mind. Second, it might be objected that my proposal is incompatible with the fact that people have *privileged access* to the contents of many of their own mental states. But this is simply not true: Odile believes that Twain is a great author, and she knows that *this* is the content of her belief. See Clapp (1994) for a detailed response to this latter objection.

is false in *c*. The rejection of the Psychological Principle of Dissent implies only that there are *some* contexts – e.g. contexts in which agents are concerned with the nature of propositional attitudes themselves – in which (3) and (4) have the *same* truth conditions. Thus endorsing the above sketched response to the psychological arguments does not preclude one from endorsing a response to the semantic arguments from opacity which respects our untutored intuitions by distinguishing the truth conditions of *many* occurrences of ascriptions such as (3) and (4).

But how is the veracity of our intuitions concerning the truth conditions of (3) and (4) to be preserved? I.e. how can *some* occurrences of (3) and (4) have distinct truth conditions? I suggest that Crimmins and Perry reject the wrong doctrine. The doctrine that should be rejected is not the Doctrine of Full Articulation, but rather the Doctrine of Propositional Truth: the truth conditions of an occurrence are *not* wholly determined by the logical form of the occurrence, and what is *designated* or *referred to* – either tacitly or explicitly – by the occurrence. Neither Crimmins and Perry nor the proponents of The Neo-Russellian Theory provide an argument in support of the Doctrine of Propositional Truth, and why should it be *assumed*? If the Doctrine of Propositional Truth and the Doctrine of Semantic Competence are granted, then it follows that the judgments ordinary, competent, speakers make concerning the truth conditions of an occurrence of a declarative sentence are to be accounted for solely by appeal to the *proposition* presented by the occurrence. But why should it be *assumed* that our untutored intuitions concerning the truth value of *an occurrence* – a complex token event which is merely one part in a complex discourse – is wholly determined by the proposition that is presented by, the information which is *semantically encoded in*, the occurrence? Given the plausibility of the doctrines of Direct Reference, Semantic Innocence, Full Articulation, and Semantic Competence, it seems that what the semantic arguments from opacity illustrate is that the truth conditions of an attitude ascription are *not* determined solely by (a) the semantic values – the referents and designations – presented by the occurrence, and (b) the logical form of the occurrence. Moreover, there are reasons for rejecting the Doctrine of Propositional Truth which are independent of our intuitions concerning the truth conditions of attitude ascriptions.

Suppose that you have just poured your breakfast cereal into a bowl, but there is no milk on the table. Sympathetic to your plight, I utter

- (8) There's milk in the fridge.

Further suppose, however, that there is not an appropriate container of

milk in the refrigerator, but rather just a tiny puddle of spoiled milk on the bottom of the refrigerator. Is my utterance true? Our intuitions dictate that, in this situation, my utterance is not true. But now consider a different set of circumstances: Suppose you are doing a biology experiment, and you need a small drop of not necessarily fresh milk. Again sympathetic to your plight, I utter an occurrence of (8). Is this utterance of (8) true? In this second situation our intuitions dictate that, even if there is only a tiny puddle of milk on the bottom of the refrigerator, my utterance is true.<sup>36</sup> Thus the occurrences of (8) – which contains no relevant overtly indexical expressions – have distinct truth conditions. How is this phenomenon to be accounted for? If one endorses the Doctrine of Propositional Truth, then one is forced to maintain that the two occurrences of (8) somehow manage to *refer to* or *designate* different semantic values, and thereby *semantically encode* distinct propositions. But what might these different semantic values be, and on what grounds could it be supposed that these entities either are, or are not, *referred to* or *designated* by my utterances?<sup>37</sup>

Of course to point out that there is good reason to reject the Doctrine of Propositional Truth is not to provide a proper response to the semantic arguments from opacity. A proper response to these arguments would require an alternative semantic theory explaining how our intuitions concerning the truth conditions of attitude ascriptions are determined, and here is not the place to undertake that daunting task.<sup>38</sup>

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<sup>36</sup> This example is a variation of an example discussed by Travis (1985).

<sup>37</sup> One could conceivably deny that (8) has different truth conditions in different contexts, just as one could conceivably deny that occurrences of 'It's raining' are true *only* if it is raining in relevant places.

<sup>38</sup> I believe the semantic framework of *Discourse Representation Theory* (DRT) – which rejects the Doctrine of Propositional Truth – holds much promise for a theory of attitude ascriptions. DRT was first presented in Kamp (1981), though a very similar theory was simultaneously developed by Heim, and presented in Heim (1982). The most comprehensive presentation of the theory is in Kamp and Reyle (1993). (Both Kamp and Heim seem to have been inspired by ideas presented in Stalnaker (1979) and (1981).) Versions of DRT have been applied to attitude ascriptions in Kamp (1988), Asher (1986), and Zeevat (1987), though I find all of these approaches inadequate, as they all needlessly involve speakers referring to esoteric mental entities.

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