

## **Knocked Out Senseless: Naturalism and Analyticity**

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I discuss two independent topics concerning Michael Devitt's Coming To Our Senses. My discussion of the first topic, naturalism, is brief. My discussion of the second topic, analyticity, is divided into four subsections, the first of which examines the definition of analyticity and is by far the longest.

### **I. Anti-A Priori Naturalism**

Devitt makes his methodological position quite clear:

Furthermore, it is troubling that, in attempting to accomplish the semantic task, we all go in for "intuition mongering", even those of us who are naturalistically inclined and skeptical of the practice (e.g., Jerry Fodor 1990: 169). Broadly, it is troubling that we seem to lack a scientifically appealing method for settling the disputes that bedevil semantics.

[Introduction]<sup>1</sup>

My second assumption ... is naturalism: that there is only one way of knowing, the empirical way that is the basis of science (whatever that way may be). So I reject "a priori knowledge".

[Introduction]

Devitt considers semantics as just another empirical science and insists on sticking to the empirical method of science. I find this extreme, methodological version of naturalism refreshingly provocative. Unfortunately, I find little concrete evidence that Devitt practices what he preaches. I fail to find his "scientific methodology for semantics" [4.?] in action anywhere in the book. What empirical scientific evidence does Devitt offer for his important claims? I see no data collection, no empirical experimentation, no statistical analysis. Just to pick a few examples among many, consider the following passages:

... Big Felix's moll knows this. She reads the newspaper and remarks to one of the mob: (7) Ralph believes that Big Felix is insane. This seems clearly true. [4.2]

First, it is not obvious that people would, on reflection, be prepared to ascribe the beliefs in these circumstances. Second, if they did, it is not obvious that the beliefs would

not refer. [4.9]

... it is not obvious that we would not be prepared to ascribe the beliefs; and if we were indeed not prepared to do so, this might be because we doubt that the subject's belief has the right reference. [4.9]

It is most unlikely that these share any epistemic, or other functional-role, property that could be the meaning.

In sum, the evidence counts against anti-Representationalism as a descriptive theory, a theory of the properties we do ascribe for semantic purposes ... [4.10]

What is Devitt's justification for saying that such things are "clearly true", "not obvious", or "most unlikely"? Devitt speaks of "the evidence ... against anti-Representationalism as a descriptive theory" in the last passage. But what empirical evidence does he present against anti-Representationalism as a descriptive theory about what properties we ascribe for certain purposes? It seems that Devitt is resorting to "the usual disappointing appeal to intuition" [4.8, note 48] himself.

Sometimes Devitt even seems to impose his own intuition upon us against a probable preponderance of the contrary intuition:

Consider the following: "Ruth believes that Gorbachev has fallen" and "Adam said that Yeltsin has risen". Such "propositional-attitude ascriptions" mostly use no semantic words but nevertheless seem partly to ascribe meanings. My working assumption, for this section and the next, is that they do indeed ascribe meanings... [2.4]

It seems to me (and I claim no empirical data to back it up--the onus for providing contrary data is on Devitt) that propositional-attitude ascriptions do not seem to ascribe meanings. If anything, they seem to ascribe propositional attitudes to people. This seems to me overwhelmingly evident. It seems singularly devious to say that they ascribe meanings to people. Perhaps, they may be said to specify attitudinal contents in ascribing propositional attitudes to people. But specification is not ascription and contents are not meanings. Devitt may say that this is a verbal point. But even if it is a verbal point, it is an important verbal point. One might characterize a decision to call Earth's moon a star as a verbal decision. But even if verbal, given a wide-spread and conflicting use of the word 'star', such a decision would have to be considered loaded, and any attempt at constructing a "science" of stars on the basis of such a decision would certainly be open to a legitimate complaint. In any case, the important point is that Devitt moves

very quickly here. He declares without empirical justification that certain sentences "seem" to do a certain thing, and then without evaluating the weight of the "seeming"--without determining whether the appearance in question deserves to be taken seriously--he swiftly elevates it into a "working assumption". I see little that is empirically scientific here.

Speaking of his "scientific methodology", Devitt says:

This methodology has a place for intuitions, but it is the same limited place that they have elsewhere in science.

[Introduction]

Intuitions are often needed to identify the subject matter for the descriptive task, and may be otherwise helpful, but nothing ultimately rests on them. [74?]

Does this help justify his intuition mongering? I am afraid not. Contrary to this sketch of the "limited place" allowed for intuitions, many of Devitt's arguments, such as those found in the paragraphs previously quoted, seem ultimately to rest on intuitions. Intuitions in those passages are not used simply "to identify the subject matter for the descriptive task", but used to drive our reasoning in a particular theoretical direction. If "nothing

ultimately rests on" intuitions, one should be able to eliminate them without serious theoretical harm. I would like to see Devitt do so.

It would not help Devitt to point out that the arch naturalist of all, W. V. Quine, himself has not engaged in empirical research in his logico-linguistic investigations; for this would at best show that Devitt is not alone in failing to practice what he preaches. But more importantly, unlike Quine, Devitt explicitly commits himself to being nothing but an empirical scientist in his research in semantics.

## **II. Analyticity**

### II.i Definition

... even with the Fregean assumption, the sentence 'All bachelors are unmarried' is not true solely in virtue of meaning and so is not analytic in the above sense. The sentence is indeed true partly in virtue of the fact that 'unmarried' must refer to anything that 'bachelor' refers to but it is also true partly in virtue of the truth of 'All unmarrieds are unmarried'. [1.6]

Devitt makes two interesting claims here. The first claim is that

`All bachelors are unmarried' is true partly in virtue of the fact that `unmarried' must apply to all to whom `bachelor' applies. The second claim is that the same sentence is true partly in virtue of the truth of another sentence, `All unmarrieds are unmarried'. Devitt does not pursue the first of these two claims but exclusively focuses on the second. This is unfortunate, for the first claim promises a better starting point toward vindication of the thesis that `All bachelors are unmarried' is true solely in virtue of meaning. We shall see how this is so shortly. Let us begin, however, with the second claim.

Whatever `partly in virtue of' may mean exactly, it seems clear from the surrounding text that Devitt has in mind the Frege-Quinean derivation of the truth of `All bachelors are unmarried' from the truth of `All unmarrieds are unmarried'. It goes something like this:

- (1) `All unmarrieds are unmarried' is true.
- So           (2) `All unmarried adult males are unmarried' is true.
- But          (3) `All bachelors are unmarried' is true if and only if
  - the result of replacing `bachelor' with its synonym
  - is true.
- And         (4) `All unmarried adult males are unmarried' is the
  - result of replacing `bachelor' with its synonym.

Therefore (5) 'All bachelors are unmarried' is true.

This seems to be a sound argument. But the existence of such an argument at best shows that 'All bachelors are unmarried' is true partly in virtue of the truth of 'All unmarrieds are unmarried' when the truth of the first sentence is regarded as derived in the above manner. If, however, there is another sound derivation of the truth of that sentence in which (1) does not occur, then it is not the case that 'All bachelors are unmarried' is true even partly in virtue of the truth of 'All unmarrieds are unmarried' when the truth of the first sentence is regarded as derived in that alternative manner. And there is indeed such a derivation.

While the above argument derives the truth of 'All bachelors are unmarried' on the basis of the truth of 'All unmarrieds are unmarried' and the substitutivity of synonyms, the alternative argument derives the same on the basis of the meaning of the sentence 'All bachelors are unmarried', or more precisely, on the basis of the meaning of the sentence form 'All ... are ...' and the meanings of 'bachelor' and 'unmarried'. It goes something like this:

(6) 'All bachelors are unmarried' is true if and only if  
'unmarried' applies to all to whom 'bachelor'  
applies.

- (7) 'Bachelor' applies to only bachelors.
  - (8) 'Unmarried' applies to all unmarrieds.
  - (9) Only unmarrieds are bachelors.
- So (10) 'Unmarried' applies to all to whom 'bachelor'  
applies.

Therefore (5) 'All bachelors are unmarried' is true.

(6) is an instance of the following schema: 'All Fs are G' is true if and only if 'G' applies to all to which 'F' applies. Note that this has nothing in particular to do with 'bachelor', 'unmarried', bachelors, or unmarrieds.<sup>2</sup> The meaning of the sentence form 'All ... are ...' assures the truth of every instance of this schema. The meaning of 'bachelor' assures the truth of (7). The meaning of 'unmarried' assures the truth of (8). (9) is incontestably true.

(10) follows from (7), (8), and (9) by propositional logic. And (5) likewise follows from (6) and (10). Thus, the argument is sound. Nowhere is 'All unmarrieds are unmarried' mentioned. This shows that we need not view the truth of 'All bachelors are unmarried' as based even partly on the truth of 'All unmarrieds are unmarried'.

Moreover, this second derivation has an important virtue the first derivation lacks. The second derivation mentions no expression that is not part of the sentence in question, 'All bachelors are unmarried', whereas the first derivation mentions two such

expressions, namely, 'All unmarrieds are unmarried' and 'All unmarried adult males are unmarried'. This means that the first derivation is, and the second derivation is not, parasitic on the assumption that these additional sentences are grammatical English sentences. But it is implausible to say that the truth of 'All bachelors are unmarried' is so parasitic. Even if English grammar were so slightly different as to disallow such sentences as grammatical, say, by means of a rule which bans a general term from occurring more than once in one sentence, 'All bachelors are unmarried' would still be true. Thus, I think the second derivation is superior to the first in revealing the true basis of the truth of 'All bachelors are unmarried'.

It is easy to realize, however, that the second derivation is not the best. Since (9) is logically equivalent to 'All bachelors are unmarried', the second derivation is needlessly long and complicated. Once we have 'All bachelors are unmarried' available as a premise, a much shorter derivation is readily available:

(11) 'All bachelors are unmarried' is true if and only if  
all bachelors are unmarried.

(12) All bachelors are unmarried.

Therefore (5) 'All bachelors are unmarried' is true.

Under the assumption that the meta-language includes the object language, (11) is based solely on matters of meaning. Indeed, it is a desideratum for any satisfactory theory of meaning for English couched in such a meta-language that it yield (11) as a theorem.<sup>3</sup> This derivation has the additional virtue of being an instance of a general schema for the truth of every (unambiguous non-indexical) true sentence:

(13) 'S' is true if and only if S.

(14) S.

Therefore (15) 'S' is true.

Some people, however, may consider this a vice, not a virtue. 'All bachelors are unmarried' is supposed to be true in a special way, a way in which many other true sentences, say 'Snow is white', are not true. But the derivation above does not seem to reveal that special way. There is another problem. In addition to (11), we need (12) to obtain (5), and it is clear that (12) is not about expressions or their meanings but about bachelors and unmarrieds.<sup>4</sup> Does this not make 'All bachelors are unmarried' true partly in virtue of something other than meaning, according to the above derivation? It appears that the question has to be answered in the affirmative.

As an important side issue, let us note that the notion of

"partly in virtue of" here cannot be explicated in the usual way. The usual notion of "partly in virtue of" is such that P's being the case is partly in virtue of Q's being the case only if it is not the case that if Q were not the case, P would be the case.<sup>5</sup> But this does not apply to the case at hand. The reason is not difficult to see. Since it is impossible that all bachelors are not unmarried, it is (vacuously) the case that if all bachelors were not unmarried, 'All bachelors are unmarried' would be true. It takes a nonstandard semantics for counterfactual conditionals to avoid this result, unless one abandons use of counterfactuals altogether in this regard. Such a semantics would allow impossible worlds among the available worlds for truth-value evaluation. I myself do not think this is as absurd as it might seem to some people, but I suspect someone like Devitt would.

As long as we exclude impossible worlds from our consideration, there is no way to remove from any world the fact that all bachelors are unmarried. Of course, an unremovable part of a foundation is still part of the foundation. The fact that (12) is an indispensable premise in the above derivation is sufficient to make all bachelors' being unmarried part of the basis on which the truth of 'All bachelors are unmarried' rests according to the above derivation.

Does this imply that there is no analytic sentence? Devitt seems to think so. Speaking of 'All unmarrieds are unmarried'

instead of 'All bachelors are unmarried', he says:

In virtue of what is 'All unmarrieds are unmarried' true? The localist could, and I think should, answer as follows: it is true partly in virtue of what it means and partly in virtue of the way the world is, the fact that all unmarrieds are unmarried. And since the truth of 'All bachelors are unmarried' depends on this logical truth, its truth also depends partly on the world. [1.6]

The fact about meaning is only part of what makes the belief true: its truth depends also on the fact that all unmarrieds are unmarried (1.6). This seems to be a worldly fact, for, it not, what? No satisfactory nonempirical account was ever given of how we could justify it. [2.2]

What does 'worldly fact' mean? If it means fact obtaining in the world, then all bachelors' being unmarried is a worldly fact. But what fact isn't? The adjective 'worldly' appears redundant.

Let us follow Devitt and say that 'All bachelors are unmarried' is true in virtue of "the way the world is, the fact that all [bachelors] are unmarried". It is a small step from this to the claim that since its truth thus "depends partly on the world", 'All

bachelors are unmarried' is not analytic. But I think this is too hasty. To say that the truth of 'All bachelors are unmarried' depends on the actual world is to imply that the sentence is not true in some other world. But it is true in all possible worlds. To put it differently, the actual world is such that all bachelors are unmarried in it because every possible world is such that all bachelors are unmarried in it. Nothing peculiar to the actual world is responsible for the fact in question. Thus, it is inappropriate to say that the truth of 'All bachelors are unmarried' depends on the actual world or depends on the way the world actually is.

In view of the fact that 'All bachelors are unmarried' is untrue in some impossible worlds, one might say that the truth of 'All bachelors are unmarried' depends on the ways the world could be. Devitt would then have to show that the ways the world could be are not determined solely by meaning. It might be interesting to speculate how he would carry it out while remaining a nominalist.

In any case, it remains that according to the above derivation, 'All bachelors are unmarried' is true partly in virtue of all bachelors being unmarried. Let us also grant Devitt that it is not the case that all bachelors are unmarried solely in virtue of meaning. Does this not force us to abandon the analyticity of 'All bachelors are unmarried'? I think not. There are four ways to resist it.

The first way is to abandon our derivation above as a way of uncovering the basis of the truth of 'All bachelors are unmarried' and adopt the following derivation instead:

- (6) 'All bachelors are unmarried' is true if and only if 'unmarried' applies to all to whom 'bachelor' applies.
- (10) 'Unmarried' applies to all to whom 'bachelor' applies.

Therefore (5) 'All bachelors are unmarried' is true.

This is a curtailed version of the second argument we have examined. In the previous derivation, (10) was derived from (7) - (9). Where does (10) come from in this derivation? The idea is that (10) comes directly from the meanings of 'bachelor' and 'unmarried'. If this idea is born out, the derivation will successfully show how to ground the truth of 'All bachelors are unmarried' solely on meaning. But how exactly do the meanings of 'bachelor' and 'unmarried' verify (10)? The meaning of 'bachelor' makes 'bachelor' apply to a certain kind of entities, and the meaning of 'unmarried' makes 'unmarried' apply to a certain kind of entities. So, to get to (10), we need an additional premise to the effect that every entity of the first kind is of the second kind. But such a premise has to be (9) or some

trivial variant of (9), like (12). So we are back to our previous derivation. Little progress has been made.

Is this the end of this idea? Not quite yet. The above way to secure (10) proves unsatisfactory because we start with the meanings of the two words 'bachelor' and 'unmarried' separately. The problem might be avoided by starting with the meanings of the two words simultaneously and saying that the meanings of 'bachelor' and 'unmarried' are such that 'unmarried' applies to all to whom 'bachelor' applies. This, of course, needs a little fleshing out, for the meaning of 'bachelor' as such tells us nothing about application of another word, say, 'unmarried', and the meaning of 'unmarried' as such tells us nothing about application of another word, say, 'bachelor'. It remains to be shown how taking the two words simultaneously helps. And this is where the unsatisfactoriness of this approach ultimately lies. It appears rather mysterious how considering the meanings of the two words simultaneously should remove the obstacle previously unremoved.

The second way is more radical. It is to abandon the definition of analyticity as truth solely in virtue of meaning. 'All bachelors are unmarried' should count as analytic one way or another because in an important sense its truth is somehow semantically guaranteed. The basis of the truth of an analytic sentence should be wholly semantic. On the other hand, we have seen above that the

truth of 'All bachelors are unmarried' partly rests on all bachelors' being unmarried. So, we conclude that all bachelors' being unmarried should be considered purely semantic. That is, it is a purely semantic fact that all bachelors are unmarried. We may then say that a sentence is analytic(ally true) if and only if its truth is based solely on its meaning and some purely semantic fact(s).

The crucial question is, "What is the definition of a purely semantic fact?" Purely semantic facts are a species of modal facts, in particular, a species of necessary facts. A fact is necessary if and only if it is a fact in every appropriately related world. The type of necessity depends on the appropriate relation between worlds, known as the accessibility relation. Choose one accessibility relation, and we may have human physiological necessity. Choose another, larger accessibility relation, and we may have physical necessity. Choose yet another, still larger accessibility relation, and we may have metaphysical necessity. In case of physical necessity, we may say that the relevant accessibility relation is defined in terms of physical laws:  $w$  is accessible from  $w'$  if and only if all laws of physics in  $w'$  are true in  $w$ . But laws are not always available in general. For example, it is not clear how exactly to characterize the accessibility relation for metaphysical necessity. Are there metaphysical laws, and if so, what form do they take? Are there general metaphysical truths which are not

metaphysical laws? Even apart from metaphysical necessity, laws seem to play only an accidental role in defining accessibility relations in general. Take political necessity. When we say truly that it is politically necessary for a particular candidate running for a political office to take a certain stand on such and such an issue in order to be elected, it does not seem required that there be any law(s) of politics governing the electoral results. All that is required seems to be some general facts about elections and some particular facts about a particular election and a particular candidate. In any case, I shall not assume that every accessibility relation should be definable in terms of laws, or any other predetermined kind of truths. Let us call the relation which relates our world to worlds in which all bachelors are unmarried, all vixens are foxes, all brothers are siblings, all walkers are movers, and so on, semantic accessibility. Then the proposal is that we regard purely semantic facts as facts which are true in all and only semantically accessible worlds.<sup>6</sup>

But this proposal falls short of completeness. In order to avoid counting such Kripkean a posteriori necessities as gold having atomic number 79, water being H<sub>2</sub>O, lightening being an electrical discharge, etc., as purely semantic facts, we need a more developed account of semantic accessibility as distinct from metaphysical accessibility. Such an account might be available after all, but

none appears to suggest itself immediately.

The third way is due to Paul Boghossian. For a reason very similar to Devitt's, Boghossian thinks it is hopeless to define analyticity as truth solely in virtue of meaning and settles for what he calls the "epistemological" definition of analyticity:

... mere grasp of S's meaning by O sufficed for O's being justified in holding S true.<sup>7</sup>

More cleanly put, S is analytic if and only if grasping of S's meaning is sufficient for being justified in holding S true. I have two complaints about this Boghossianian definition. First, it seems to describe analyticity rather than defining it. As soon as O grasps S's meaning, O is in a position to see S's truth, and if O comes to hold S true as a result, O is justified in holding S true. O is justified in holding S true by grasping S's meaning precisely because S's meaning guarantees S's truth, and S's meaning guarantees its truth because S is analytic. Boghossian's definition short-circuits this chain of account. Second, infinitely many English sentences are entirely beyond human capability of grasping, due to excessive length or complication. This means that the hypothetical subject of grasping must be an entity equipped with super-human linguistic capabilities, or else we would be compelled to deem too many

sentences as (vacuously) analytic (merely because of their excessive length or complexity).

Fortunately, there is a fourth way to preserve the analyticity of 'All bachelors are unmarried', which does not abandon the definition of analyticity as truth solely in virtue of meaning. Let us reconsider our third argument:

(11) 'All bachelors are unmarried' is true if and only if  
all bachelors are unmarried.

(12) All bachelors are unmarried.

Therefore (5) 'All bachelors are unmarried' is true.

This argument successfully shows that the truth of 'All bachelors are unmarried' is based solely on meaning, provided that (11) and (12) are shown to be based solely on matters of meaning. We have seen that (11) is indeed so based. (12) is more problematic. As we have noted, it describes a (worldly) fact, and many philosophers, including Devitt,<sup>8</sup> take this to mean that the above derivation fails to show that 'All bachelors are unmarried' is true solely in virtue of meaning. Our fourth way denies this. It denies that the fact that (12) describes a (worldly) fact stands in the way of the truth of (12) being based solely on matters of meaning. The idea is to construct a sound argument whose premises are based solely on matters

of meaning and whose conclusion is (12). Here is my proposal:

(16) For any  $x$ , 'bachelor' applies to  $x$  if  $x$  is a bachelor.

(17) For any  $x$ , if 'bachelor' applies to  $x$ , then  $x$  is unmarried.

Therefore (12) All bachelors are unmarried.

The argument is valid. (16) and (17) are clearly true. So the argument is sound. To see that the premises are based solely on matters of meaning, compare them with (11), which we have ascertained to be based solely on matters of meaning. The basis for (11) is the meaning of the whole sentence 'All bachelors are unmarried'. If we consider subsentential expressions in the same spirit, we will have, among others:

(18) For any  $x$ , 'bachelor' applies to  $x$  if and only if  $x$  is a bachelor.

So if (11) is based solely on matters of meaning, so is (18). But (18) entails (16). So (16) is also so based. The case for (17) is a little more complicated. (17) is derivable from (18) and 'All bachelors are unmarried' but such a derivation is obviously uselessly

circular. A better idea is this: Any satisfactory theory of the meaning of 'bachelor' (in English) should entail (18) because 'bachelor' means bachelor. By the same token, any satisfactory theory of the meaning of 'bachelor' should entail the following (19) because 'bachelor' means unmarried adult male:

(19) For any  $x$ , 'bachelor' applies to  $x$  if and only if  $x$  is an unmarried adult male.

(19) obviously entails (17). Note that the entailment of (17) by (19) is wholly sanctioned by propositional logic (biconditional elimination and conjunction elimination, to be specific) and does not require an additional premise to the effect that all unmarried adult males are unmarried.<sup>9</sup> If someone complains that we still rely on logic and therefore do not succeed in showing the basis for (5) to be exclusively matters of meaning, we should remind such a person that using logical rules of inference is the only way to "show" whatever needs to be "shown", and without them, the relevant notion of "showing" loses its content.

The same idea also works to resurrect other derivations, e.g.:

(6) 'All bachelors are unmarried' is true if and only if 'unmarried' applies to all to whom 'bachelor'

applies.

- (10) `Unmarried' applies to all to whom `bachelor' applies.

Therefore (5) `All bachelors are unmarried' is true.

All we need in addition is

- (20) For any  $x$ , `unmarried' applies to  $x$  if and only if  $x$  is unmarried.

(20) is based solely on matters of meaning just as (18), and (17) and (20) jointly entail (10). So, if (6) is based solely on matters of meaning, this argument, with the added premise (20) grounding (10), also shows that `All bachelors are unmarried' is true solely in virtue of meaning; and (6) is indeed based solely on the meaning of the schema `All ( ) are ( )'.

Thus, it is premature to abandon hope for defining analyticity as truth solely in virtue of meaning.

### II.ii Psychological Necessity

Perhaps it is not psychologically possible for Joe to drop (A) [ `All Fs are G', e.g., `All bachelors are unmarried'] from his

belief box without changing meaning. But nothing interesting follows from this, and certainly nothing unQuinean does. It is, for example, quite compatible with Quinean epistemology that it should be psychologically impossible for humans to abandon various logical truths. [1.9]

If not psychological impossibility, what kind of impossibility is "interesting"? Certainly not logical or metaphysical impossibility. 'Joe drops (A) from his belief box without changing meaning' is not a logical contradiction. And worlds in which Joe drops (A) from his belief box without changing meaning are worlds in which Joe ceases to understand (A) correctly, or he does not fully realize that he is dropping (A) from his belief box without changing meaning, or he is somehow blind to the crucial connection between (A)'s meaning and (A)'s rightful place in the belief box, or he is irrational or otherwise psychologically inexplicable. Assuming that Joe understands (A) correctly, fully realizes that he is dropping (A) from his belief box without changing meaning, and is not blind to the crucial connection between (A)'s meaning and (A)'s rightful place in the belief box, if Joe drops (A) from his belief box, his behavior is psychologically unexplainable, just as the behavior of a physical object which violates a law of physics is physically unexplainable. If Joe's behavior's psychologically unexplainable, our ascriptions of

beliefs to him is pointless by Devitt's own standards. We can no longer make psychological sense of his behavior or use his psychological states to learn about the world. He is a psychological freak, just as an object which violates a law of physics is a physical freak. Contrary to what Devitt says, I think this is very interesting. For one thing, this means that psychological necessities hold the community of psychological subjects together as such and enable its members to make sense of one another's actions and use one another to learn about the world. In short, all manners of intentional interaction in the community depends on the psychological necessities. Thus, to say that it is possible in some sense to drop (A) from the belief box (without changing its meaning, etc.) even though it is psychologically impossible to do so is like saying that it is possible in some sense to drop a stone from a tall building and have it float in mid air (without support, etc.) even though it is physically impossible to do so. Such a sense of 'possible' is mysterious, or metaphysical at best. I doubt that it accords well with the brand of naturalism Devitt favors.

Oddly, Devitt appears to misplace psychological necessity, grouping it together with metaphysical necessity:

But Joe is no more prevented from revising his relation to the proposition than was our capitalist from revising her relation

to the means of production. If Joe is to entertain the proposition [that all Fs are G] he must believe it. If the person is to be a capitalist she must own means of production. In neither case is this "metaphysical" unrevisability objectionable. [1.10]

But the analogy does not hold. Someone's being a capitalist (in the sense Devitt has in mind) without owning means of production is a metaphysical impossibility. But it is not metaphysically impossible for Joe to entertain the proposition in question without believing it; imagine Joe to be a psychological freak. It is at most psychological impossibility that Joe entertain the proposition without believing it.

### II.iii Triviality

Morton White pointed out years ago that "the statement ``All men are rational animals' is analytic' is itself empirical" (1950: 320). This point has not had the impact it deserves. Note that even if there were sentences that were strongly analytic in that they were true solely in virtue of meaning, hence not in virtue of anything about the extralinguistic world, they would still be revisable. For, one's opinion of

the linguistic facts upon which such truths would depend would be revisable. [1.9, note 17]

That a particular sentence is revisable in this sense, i.e., possible to be purged from or admitted into the belief box as long as its interpretation is changed, has no bearing on the question of whether a certain proposition is rationally believable or not. Suppose Joe accepts 'All men are rational animals' because he interprets it to mean that all men are rational animals and believes that all men are rational animals. He then stops accepting the same sentence and stops interpreting it to mean that all men are rational animals. Instead, he starts interpreting the sentence to mean that not all men are rational animals. In such a case, Joe's belief that all men are rational animals remains intact. It is indeed crucial that he continues to believe that all men are rational animals, for otherwise, how could we explain why he now rejects the sentence 'All men are rational animals' as he now interprets it to mean that not all men are rational animals?

#### II.iv Empirical Disconfirmation

Devitt operates under an idiosyncratic notion of empirical disconfirmation:

On the contrary, it is that very token in the belief box that has been dropped in the face of empirical evidence. And the possibility of this is all that matters to naturalism. It is true that in being dropped and moved to the disbelief box, it has changed meaning and hence become a token of a different type, but this is beside the point: it has still been empirically disconfirmed. [1.11]

According to Devitt, dropping of a token from the belief box accompanied by a reinterpretation of the token is a form of empirical disconfirmation. Suppose I hear Joe utter a sentence token which sounds like /hans li:pt/, interpret it to mean that Hans leaped, and accept Joe's utterance as so interpreted. A moment later I change my mind and reject Joe's sentence, while reinterpreting it to mean that Hans loves. The reason for my change of mind could be any one of a wide variety of things. Maybe I realized that Joe was speaking German. Maybe I ate rotten lunch. The important point is that it need not involve evidence about whether Hans leaped. According to Devitt, I have empirically disconfirmed Joe's utterance, all the same. Here Devitt is practicing what he preaches. He is empirically disconfirming (in his sense) the claim that reinterpretation is insufficient for empirical disconfirmation, by reinterpreting 'empirical disconfirmation'.

So far I have been overly charitable to Devitt in going along with the Mentalese metaphor. But the metaphor has been made to carry too much weight. It is time to be literal. When Devitt speaks of one and the same sentence token "that has been dropped" from the belief box and "moved to the disbelief box", we should be skeptical. Saying that a Mentalese sentence is in the belief or disbelief box is nothing more than a handy shorthand for saying that the subject is in a brain state (or possibly, some other ground-level state) of a certain functional type. When Joe believes a particular proposition  $P$  and subsequently comes to disbelieve  $P$ , he is in a certain brain state of a certain type first and then comes to be in another brain state of another type. His first brain state token disappears to be replaced by his second brain state token. No single brain state token moves from here to there.

Will it help to speak of a state token of some proper part of the brain? No. The part in question of Joe's brain is in one state token and then in another state token. The first state token does not become the second, any more than a particular state token of Joe's right hand being clenched becomes a subsequent state token of his right hand being open. There is no continuity at the level of state tokens. When speaking of public languages like English, it is perfectly legitimate to speak of one and the same sentence token being moved from here to there, for there is a clear enough criterion

of identity through space for such sentence tokens. But extending such talk to Mentalese is utterly illegitimate, for there is no clear enough criterion of identity through brain states for Mentalese sentence tokens.<sup>10</sup>

#### NOTES

1. All quotations are from Devitt's Coming To Our Senses (Cambridge University Press, 1995), unless otherwise noted. All emphases in them are original.
2. Remember that this derivation is an alternative to going through 'All unmarrieds are unmarried'.
3. Donald Davidson was the first to notice this. See his "Truth and Meaning", Synthese 17 (1967), 304-323.
4. Do not say that we can accept (12) because we know that 'All bachelors are unmarried' is true. To do so would destroy the point of the derivation. The truth of 'All bachelors are unmarried' should be the goal, not a starting assumption.
5. That the usual notion of "partly in virtue of" is also such that P's being the case is partly in virtue of Q's being the case only if if Q were not the case, P would not be the case, does not contradict this.

6. Every world metaphysically accessible (from the actual world) is semantically accessible (from the actual world), but not vice versa. Some worlds are semantically accessible but not metaphysically accessible. Thus the standard objections of coarse-grainedness against possible-worlds semantics do not apply.

7. "Analyticity", A Companion to the Philosophy of Language, Crispin Wright and Bob Hale (eds.), (Oxford: Blackwell, 1996).

8. And Paul Boghossian.

9. To insist otherwise is to miss the point Lewis Carroll made in "What the Tortoise Said to Achilles", Mind 4 (1895), 278-280, that inference rules should not be confused with premises.

10. I thank Michael Devitt and my audience at the conference on naturalized semantics at University of Maribor, Slovenia in June, 1996 for useful comments.