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The Meaning of ‘Actually’

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ABSTRACT

The paper is an investigation into the concept of actuality from the standpoint of the philosophy of language. It is argued that expressions such as ‘actually’ and ‘in fact’ are not indexicals like ‘here’ and ‘now’; when e.g. ‘Snow is actually white’ is uttered in a world, what proposition is conveyed does not depend on the world. Nor are such expressions ambiguous. The paper makes a suggestion about the role that ‘actually’ and its cognates do play. It is also argued that the sentence ‘Actually *S*’ expresses a necessary truth only if *S* itself expresses one. In order to capture the necessitation of the proposition expressed in ‘Actually *S*’, it is not sufficient to prefix the word ‘necessarily’.

1. Introduction and Background

1.1 What is the role of ‘actually’ and its synonyms? Our focus here is on the meaning or meanings that ‘actually’ has in English, and not on any stipulations, but I shall make several remarks about other meanings in the area. The question is interesting because the notion of actuality is not *prima facie* less important than necessity and possibility, which have received far more attention. Indeed, actuality sometimes plays a crucial part in philosophical arguments. The notion can be profitably studied by means of the philosophy of language.

Although I shall question the ambiguity of ‘actually’, there is no doubt that sometimes we use ‘actually’ to talk about how things are in fact, and sometimes we use it differently. When we place it outside the scope of every other modal operator, we certainly use it in the former way. But when we place ‘actually’ (or its synonym ‘in fact’) within the scope of another modal operator, the situation is more complicated. Sometimes we do use it to talk about how

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things are in fact. In the sentence

(1) China could have had fewer inhabitants than it actually has, the comparison is with the number of people who in fact live in China. But in either of the sentences

(2) There could have been a woman who thought herself mortal but actually was not and

(3) There could have been a woman who was very rich but still, if her life had been slightly different, would have owned even more things than she actually owned, we envisage a possible situation and use ‘actually’ to talk about how things are in that situation, not how they are in reality.

Many sentences in which ‘actually’ occurs have two readings, one on which we use the ‘actually’ to talk about how things are in fact and one on which we do not. So the sentences

(4) It is necessarily the case that if something is a ghost, it is actually a ghost and

(5) If there were camels in South America, each one of them would belong to a species actually coming from Africa

are ambiguous. On one reading of (4) we use the ‘actually’ to talk about how things are in fact. Then (4) is equivalent to ‘There could not have been something that was a ghost, but that, as things stand, is not a ghost’. Assuming it is possible that there should be ghosts, (4) is false on that reading. For there could have been ghosts which in reality do not exist at all and *a fortiori* are not ghosts. On another reading of (4) we do not use the ‘actually’ to talk about how things are in fact. Then (4) is true because it is equivalent to ‘It is necessarily the case that every ghost is a ghost’. Likewise, if we use the ‘actually’ in (5) to talk about how things are in fact, (5) is equivalent to ‘If there were camels in South America, each one of them would belong to a species that actually comes from Africa’ and concerns just those species which, as things stand, come from Africa. If we do not use the ‘actually’ in that way, (5) is equivalent to ‘If there were camels in South America, each one of them would belong to a

species coming from Africa'.¹

When an occurrence of 'actually' is not used to talk about how things are in fact, it is somehow connected to a modal operator in whose scope it lies. I shall say that in such cases the occurrence *points back*, or *is bound*, to the modal operator. So in (2) the 'actually' points back to the 'could have been'; the latter introduces a possible situation, and we use the 'actually' to talk about how things are in that situation. The 'actually' in (3) is also bound to the 'could have been', and not to the modal operator we must detect in the embedded subjunctive conditional. (For our purposes, it does not matter whether this operator is the clause 'if her life had been slightly different' or whether it is the 'if' taken together with the mood of the verbs in the antecedent and consequent.) Similarly, on the second reading of (4) the 'actually' points back to the 'necessarily', and on the second reading of (5) the 'actually' is bound to the modal operator we must recover from the subjunctive conditional. The nature of the connection I mark with the terms 'points back to' and 'is bound to' is not clear. I shall later suggest that the connection is syntactic.

There is a theory about 'actually' which is popular. According to that theory, 'actually' is ambiguous; it has two senses. That is why sentences such as (4) and (5) are ambiguous. In its primary sense, 'actually' is indexical: it is context-dependent like 'I', 'you', 'now', 'here', 'this', 'this tree', 'that man' and 'the aforementioned'. When one uses it in this world, it refers to this world, but if one used it in another world, it would refer to that world. 'Actually' singles out the world in which it is uttered, just as 'now' and 'here' single out the time and place respectively. 'Actually' always has the primary sense in examples like (1); that is, it has that sense whenever it does not point back to any other modal operator but

¹ When we want to use 'actually' within the scope of another modal operator in order to talk about how things are in fact, we can frequently avoid the ambiguity exemplified in (4) and (5). We can do so by putting the verbs in appropriately contrasting moods or tenses. The sentence 'There could not have been something that was a ghost, but that actually is not a ghost' is unambiguous because of the contrast between the 'was' and the 'is'. (1) presents a similar contrast. The sentence 'If there were camels in South America, each one of them would belong to a species that actually comes from Africa' is (I think) unambiguous because of the contrast between the 'would belong' and the 'comes'. (Cresswell 1990, ch. 3) cites various sentences containing 'actually'.

occurs in the scope of at least one. Also, it often, perhaps always, has the primary sense when it does not even occur in the scope of any other modal operator. On the other hand, whenever ‘actually’ points back to another modal operator, it has a different, secondary sense. The idea that ‘actually’ is an indexical singling out the world in which it is uttered was put forward by D. Lewis (1970, 18) and adopted by D. Kaplan (1989a, 489; 1989b, 594–596).² It was Lewis who also made the distinction between two senses (1970, 19 and 22; 1986, 94). N. Salmon argued for both the indexicality and the ambiguity of ‘actually’ (1987, 29–43).³ One of the main aims of this paper is to refute that theory.

In Section 2, I shall focus on the occurrences of ‘actually’ which do not point back. I will explain why they provide no convincing reason for saying that the word is indexical, and why ‘actually’ does not have the alleged primary sense. We shall also see that, contrary to what is frequently thought, ‘Actually *S*’ expresses a contingent truth if *S* itself expresses one. In Section 3, I will argue that ‘actually’ is not ambiguous: it has a single meaning. We shall also see what that meaning is: ‘actually’ is mainly a device for cancelling, in a certain sense, the modal operators in whose scope it occurs, but it has some descriptive import too. In Section 4, we shall turn to words, phrases and symbols which, either by stipulation or otherwise, have meanings that are similar to, but not identical with, the meaning of ‘actually’. They are not its synonyms, but they are near-synonyms. We shall deal particularly with the symbol ‘@’, as representative of the actuality operators studied in an important tradition in modal logic, and

² Perry (1997, 586) puts ‘actual’ on “the standard list of indexicals”.

³ Lewis considers that ‘actually’ in its secondary sense is also indexical: when it is used in a context in which one or more worlds are under consideration, its reference is determined accordingly. Salmon considers that ‘actually’ in its secondary sense is not indexical; it is a superfluous operator. Neither Lewis nor Salmon discusses examples—like (3)—in which a modal operator intervenes between the operator to which an ‘actually’ is bound and the ‘actually’ itself. To the best of my knowledge, Kaplan has not claimed that ‘actually’ is ambiguous.

As far as Lewis and Salmon tell us, it may be that when ‘actually’ does not occur within the scope of another modal operator, it sometimes has the secondary sense. For example, in ‘Mary thinks herself clever, but actually is not’ it may have the same sense as in (2). In (2007, 268–269) S. Soames effectively argues that the primary sense of ‘actually’ suffices for all the examples in which the word does not occur within the scope of another modal operator.

with the phrase ‘in this world’. It will become apparent that no near-synonym has all the semantic features that are usually attributed to ‘actually’. So the usual views about it do not even become correct when turned into views about one of the near-synonyms. Finally, in Section 5, we shall briefly discuss whether ‘actually’ displays an indexicality very different from that commonly ascribed to it.

1.2 Our discussion will presuppose an actualist framework: it will presuppose the principle

(AP1) p iff actually p .

This schema seems as difficult to doubt as the simple schemas of classical propositional logic. So it is surely worth adhering to and not abandoning save in the last resort. (AP1) shows that in extensional contexts we can add or remove ‘actually’ without any change in truth-value.

It is easy to find principles that connect ‘actually’ with the adjective ‘actual’. So we have

(AP2) $(\forall x)(x \text{ is an actual } F \text{ iff actually } x \text{ is an } F)$.

I am an actual philosopher because I am actually a philosopher. But since it is not actually the case that I am an archaeologist, I am not an actual archaeologist. We also have

(AP3) $(\forall x)(x \text{ is the actual } F \text{ iff actually } x \text{ is the } F)$.

Paris is the actual capital of France, for actually Paris is the capital of France.⁴

One corollary of (AP1–2) is a claim commonly called ‘actualism’: the claim that every being is an actual being. For by (AP1) every being is actually a being. And by (AP2) everything that is actually a being is an actual being. Another corollary of (AP1) is that if something exists, it actually exists. Combining this with the anti-Meinongian thesis that every being exists, we conclude that every being actually exists. However, (AP1–3) permit us to accept that in some sense there are many possible worlds. While adhering to our actualist

⁴ We can derive (AP3) from (AP1–2) using Russell’s theory of definite descriptions. According to the version of the theory which Russell (1911, 156 and 165) provided for sentences of the form ‘ a is the G ’, we can analyse ‘ x is the actual F ’ as ‘ x is an actual F and $\neg(\exists y)(y \text{ is other than } x, \text{ and } y \text{ is an actual } F)$ ’, and we can analyse ‘actually x is the F ’ as ‘actually [x is an F and $\neg(\exists y)(y \text{ is other than } x, \text{ and } y \text{ is an } F)$]’. By (AP2) the former *analysans* is equivalent to ‘actually x is an F , and $\neg(\exists y)(y \text{ is other than } x, \text{ and actually } y \text{ is an } F)$ ’. And this is equivalent to the latter *analysans* by (AP1).

framework, we can choose an appropriate one from among the senses that the term ‘possible world’ has acquired in philosophy and say that there are many possible worlds but they are all actual entities.

Indeed, I shall employ a concept of possible worlds, but prefer to express it using the term ‘world-state’. (The term ‘world’ is reserved for another purpose.) It is Plantinga’s concept (Plantinga 1974, 44–45). We begin with an ontology of states of affairs. Some of them obtain (e.g. my being a philosopher in 2008) and some do not obtain (e.g. my being an archaeologist in 2008). A state of affairs is possible just in case it either obtains or, at any rate, could have obtained. A possible state of affairs w is a *world-state* if and only if, for every possible state of affairs s , either it is necessarily the case that if w obtains, so does s or it is necessarily the case that if w obtains, s does not. So world-states are maximal possible states of affairs. Although I am employing a particular concept (Plantinga’s) for specificity, other actualist concepts of possible worlds would serve my purposes equally well. It is not easy to show that there are world-states (or that there are possible worlds in any other sense of the term). However, I shall here assume that there are: the assumption enables us to formulate certain objections to, and certain arguments for, the views presented in Section 2.

I shall also use the operator ‘at w ’. Sentences of the form ‘At the world-state w , p ’ will mean ‘It is necessarily the case that if w obtains, then p ’. This use of ‘at w ’ also derives essentially from Plantinga (1974, 46–47). One basic principle governing world-states is the schema ‘For every world-state w , either at w p or at w $\neg p$ ’. For instance, either it is the case at w that there are blue horses or it is the case at w that there are no blue horses.

Finally, it will be helpful if we keep in mind certain features of the logic of ‘actually’. Let S be a sentence that contains no word like ‘actually’ and its cognates. If we prefix a necessity or possibility operator to ‘actually S ’ and consider that the ‘actually’ does not point back to that operator, the result will be materially equivalent to ‘actually S ’. For example, the sentence ‘It is possible that, actually, there is life on Mars’, appropriately interpreted, can be recast as

(6) It could have been that things were such that in reality there is life on Mars.

Here the whole phrase ‘it could have been that things were such that’ can be seen as a

possibility operator. If ‘Actually there is life on Mars’ (or ‘In reality there is life on Mars’) is true, then (6) is true, too, by the principle that whatever is the case is possible. If ‘Actually there is life on Mars’ is false, (6) is also false: it could have been that there was life on Mars, but it could not have been that things were such that in reality there is life on Mars. Indeed, if we prefix any number of necessity or possibility operators to ‘actually S ’ and consider that the ‘actually’ does not point back to any one of them, the sentence we form will be materially equivalent to ‘actually S ’. Similarly, if we prefix any number of necessity or possibility operators to ‘actually S ’ but consider that the ‘actually’ points back to one of them, the sentence we form will be materially equivalent to the sentence which results from it when we omit every operator that intervenes between the operator connected to the ‘actually’ and the ‘actually’ itself. For example, the sentence

(7) It could have been that it could have been that actually there was life on Mars, interpreted in such a way that the ‘actually’ is bound to the first ‘could have been’, is materially equivalent to the sentence ‘It could have been that actually there was life on Mars’ similarly interpreted. The first ‘could have been’ in (7) introduces a possible situation which is described in the ensuing clause, and which plays the role that reality plays in (6). Thus, just as the ‘it could have been that things were such that’ may be omitted from (6) without effect on truth-value, so the intervening possibility operator may be omitted from (7).⁵

2. Indexicality and Necessary Truths

2.1 When we discuss indexicals, it is simpler to put the discussion, not in terms of strings of phonemes, but in terms of combinations of such strings and meanings. We can call those combinations *expressions*. In order to talk about expressions, I shall introduce a system of proper names for them which involves guillemets, « and ». So «river» will be the combination of the string of phonemes ‘river’ and the meaning that ‘river’ has in current English. Similarly, «you» will be the combination of the string ‘you’ and its meaning, one or more rules that govern its use. It is possible that ‘river’ should have another meaning, but it is

⁵ (Stephanou 2001) discusses the logic of ‘actually’ covering both bound and unbound occurrences of the word.

impossible that «river» should have another meaning: its meaning is an essential aspect of it, so if ‘river’ had a different meaning, we would have an expression other than «river».⁶

In order to be an utterance of an expression *e*, an utterance must produce (or use) a token of the string of phonemes which is the one aspect of *e*. But it must also have the meaning that is the other aspect, or at least it must have some semantic features that are a function of the meaning of *e* and the context. So when one utters the word ‘river’ in normal circumstances, this act counts also as an utterance of the expression «river»; and when a speaker uses ‘you’ in talking to an audience, the utterance is also an utterance of «you».⁷

A *complete* utterance is an utterance of a sentence and is not part of an utterance of a longer sentence. When I talk about utterances of a sentence or sentential expression, such as «Snow is white», I shall mean complete utterances of the sentence or sentential expression unless the opposite is explicitly indicated.

Our nomenclature for expressions breaks down in the case of ambiguous strings. For example, if the word ‘actually’ is ambiguous, we have not specified which expression is designated when the word is flanked by guillemets. I shall argue that ‘actually’ is unambiguous. However, the lack of ambiguity cannot be presupposed here, so we need a special stipulation. Here it is: «actually» will be the combination of the word ‘actually’ with its meaning that is at work whenever an occurrence of the word is not bound to another modal operator but (from a syntactic viewpoint) lies in the scope of such an operator. That is the meaning that ‘actually’ has in the sentence ‘Snow could have been a colour other than the one it actually is’, which is like (1). Inevitably, ‘actually’ often has the same sense when it does not even occur within the scope of another modal operator. For example, it would be

⁶ The terms ‘word’, ‘phrase’ and ‘sentence’ will be reserved for strings of phonemes, not for expressions.

⁷ We shall be talking about the semantic features that an utterance has in the public language used. The concepts of speaker’s meaning and speaker’s reference will not enter into the discussion, although the semantic features that an utterance has in the public language are sometimes partly determined by what the speaker meant by it. Also, it simplifies things to assume that there could not be an ambiguous utterance. The assumption is of course an idealization. In reality, when we utter a word that is ambiguous and corresponds to two expressions, sometimes the utterance itself is similarly ambiguous.

strange to deny that it has that sense in ‘Snow could have been another colour, but actually it is white’ and similar statements that contrast what is in fact the case with what could or would be.⁸ Likewise, «actual» will be the combination of the word ‘actual’ and its meaning that is at work in at least sentences such as ‘Snow could have been a colour that was less bright than its actual colour is’ and ‘The actual colour of snow is bright, but snow could have been a less bright colour’. The other words, phrases and sentences whose corresponding expressions we shall discuss either are unambiguous or have only one meaning that is relevant to the discussion.

Strings of phonemes are often ambiguous, and a string may be indexical in one of its senses but not in another. Moreover, even if a string has a single meaning, it could have had a different one. For these reasons, when we discuss indexicals it proves simpler to put the discussion in terms of expressions, which are unambiguous and have their meanings essentially. Then we do not have to complicate our generalizations about indexicals by relativizing various semantic concepts to senses. So let me put in our new terminology the view we shall discuss first: it is the view that «actually» is indexical, like «I», «you», «now», «here», «this», «this tree» and «that man».

In Subsections 2.2 and 2.3 we shall see three arguments for that view, and they will be shown to be inadequate. Still, could it be that «actually» is indexical, although no convincing argument for that view has been offered? Subsection 2.4 will show that «actually» does not have the alleged primary sense and that it is not indexical, or at least it is not an indexical that involves the extralinguistic context, as it is usually thought to do. Subsection 2.5 will begin with an objection. The discussion of the objection will soon turn into an argument for a view already broached in 2.3: the proposition that actually snow is white, for example, is not a necessary truth, whereas the proposition that snow is white iff actually snow is white is such a truth.

2.2 One argument for the indexicality of «actually», «actual» and the like is due to D. Lewis

⁸ That is also the sense that ‘actually’ has whenever it is used, rather than mentioned, in Section 2 of the present paper. Of course, if the word is unambiguous, it has no other sense.

(1970, 19; 1986, 93–94) and has two aspects. First, if «actual» is not indexical and expresses a property that only one world has, then we are extremely lucky to live in the world which has that property, and not in the uncountably many worlds that lack it. Such luck is improbable. Second, if «actually», «actual», etc. are not indexical, it cannot be explained how we know that we live in the actual world, and not in one of the nonactual worlds. How did we acquire that knowledge? If «actually» and its cognates are indexical, we have that knowledge just as I know that I am here now. I know it because I know that any utterance of «I am here now» is true: «I am here now» cannot be uttered falsely.

This argument may be persuasive in the framework of Lewis's metaphysics of modality, but loses its force when it is embedded in the actualist perspective adopted here. A response to Lewis's argument from this perspective depends also on how we shall construe the term 'world'. Among several possible interpretations, we can interpret it as Lewis himself does in his (1986), i.e. as meaning 'spatiotemporal totality', or we may use it in the sense of 'totality of all beings'. On the former construal, a world is a mereological sum all of whose parts are located in the same spatiotemporal framework, but it is not itself part of a larger sum all of whose parts are located in the same spatiotemporal framework. On the latter construal, the world is the maximum mereological sum; this construal is interpretatively unfair to Lewis, but quite natural.

If we interpret 'world' in the former manner, then from the actualist perspective we should say that every world is an actual world. For by (AP1) if something is a spatiotemporal totality, it is actually a spatiotemporal totality; and by (AP2) whatever is actually such a totality is an actual spatiotemporal totality. And, similarly, every actual world is a world. Therefore, either there is only one world and it is the actual world or there are many worlds but none is *the* actual world. Either way, there is no question of luck. Further, we do not know that we live in the actual world, for we do not know that there is only one (actual) world. We do not know how many spatiotemporal totalities there are. As far as I can see, we possess neither sufficient evidence to ground the claim that there is only one such totality nor sufficient evidence to ground the claim that there many (actual) spatiotemporal totalities.

If we interpret 'world' in the latter manner, then from the actualist perspective we should

say that the totality of all beings (including as many spatiotemporal totalities as there happen to be) is the actual world. For if something is the totality of all beings, then it is actually the totality of all beings; and by (AP3) whatever is actually the totality of all beings is the actual totality of all beings. Thus, again, there is no question of luck; since there is nothing beyond the actual world, we are not lucky to be part of it. As for my belief that I exist in the actual world, it counts as knowledge because I validly infer it from certain other things I know. The first of those things is that I exist. The others are tautologies: every being is part of the totality of all beings; this totality is the world; if something is the world, then it is actually the world; and if something is actually the world, then it is the actual world.

The sense in which ‘world’ will be used and discussed in the rest of this paper is the sense of ‘totality of all beings’. So there is only one world, but there are many world-states.

There is a second argument for the indexicality of «actually» which might seem convincing. This argument, which is a variant on one offered by Hazen (1979, 3), points out that when we utter the expression «actually» (at least when we utter it outside modal contexts) the utterance refers to the actual world: saying «actually» is like saying «in the actual world». But if things were different and we lived in another world, then any utterance of «actually» (at least any utterance of it outside modal contexts) would refer to that world. Therefore, since reference may vary between its utterances, «actually» is indexical. What characterizes an indexical expression is that utterances of it may differ in reference.

As van Inwagen (1980, 410–414) has remarked, if that argument is sound, an analogous argument will show that definite descriptions such as «the author of the *Republic*» are indexicals. When we use the expression «the author of the *Republic*» (or at any rate when we use it in an extensional context) our utterance refers to Plato. If the *Republic* had been written by Xenophon, then any utterances of the expression (or at any rate utterances of it in extensional contexts) would refer to him. Yet «the author of the *Republic*» does not seem to be an indexical. At least *prima facie*, it is very implausible to suppose that definite descriptions such as «the author of the *Republic*» and «the originator of the theory of relativity» (which is van Inwagen’s own example) are context-dependent like «I», «now»,

«here», «this» and «this tree».⁹

My notion of reference is a weak one. An utterance refers to an object or person just in case the presence of the utterance in a piece of discourse makes the object or person into something that is talked about in that piece of discourse. When I say «The author of the *Republic* bears antidemocratic sentiments», my utterance of the definite description refers to Plato because its presence in my utterance of the whole statement makes Plato into something that is talked about in the latter utterance. And it does so simply because Plato fits the description.

The second argument for the indexicality of «actually» presupposes the principle that, for every expression e and everything x , if an utterance of e refers to x but it is possible that an utterance of e should refer to something other than x , then e is indexical. That principle is too crude. When we check whether a given expression is indexical, we try to find utterances of the expression which differ in reference. In doing so, we normally keep reality constant, so to speak: we examine what the utterances refer to, not what they would refer to if things were different. If we begin varying reality too, our criterion may go awry. There are many expressions e (typically definite descriptions) such that necessarily, when e is uttered in a simple sentence, the meaning of e , either on its own or together with the context of the utterance, specifies a condition (e.g. being the author of a particular book) and the utterance refers to whatever happens to satisfy the condition. Thus, even if the meaning of such an expression e is not like a rule invoking context (and so is unlike the meaning of «I» or «this») and specifies the same condition irrespective of context, it is still possible that the utterances of e in simple sentences should have a reference other than they have in fact, for it is possible that the relevant condition should be satisfied by something other than what satisfies it in fact.

At this point one may be tempted to replace the crude principle with the following test: an expression e is an indexical if and only if it is possible that two utterances of e should

⁹ What is implausible concerns only definite descriptions that do not seem to involve any restriction to a contextually selected domain of discourse. It is another issue whether the so-called incomplete definite descriptions, such as «the book» and «the mat», are indexical.

differ in reference. This test does not vary reality very much: at least, it does not vary reality between the two utterances. It is too severe, though. It is impossible that two utterances of the expression «this world» should differ in reference. For it is impossible that there should be more than one world (more than one totality of all beings). Yet «this world» is an indexical. We can regard it as one of our pretheoretical data that «this world» belongs semantically together with «I», «now», «this» and «this tree».

The upshot is that we need subtler criteria of indexicality.

2.3 We can find one once we realize that if, for example, I say «I am a philosopher» (i.e. if I utter an utterance of «I am a philosopher») and you also say «I am a philosopher», the two utterances of «I» do not simply differ in reference. Each makes a distinct contribution to determining what proposition is expressed by the complete utterance of which it is a part. In Kaplan's terminology, each has a distinct content. Our utterances of «I am a philosopher» express different propositions, and this difference can be put down to the contribution of the two utterances of «I». It may be that the content of my utterance of «I» is simply me; in this case we have direct reference. Or it may be that the content is a combination of myself with a way in which I am presented. This is not the place to discuss the issue. What is important is that the two utterances of «I» differ in content.

My notion of a proposition is a standard one. A proposition is not a sentence; in fact, it is not a linguistic entity at all. However, a proposition contains information about how things are, and is expressed by any linguistic entity that contains just the same information. A proposition contains only one piece or body of information (there is no ambiguity in propositions) and could not have contained any other. Thus, a proposition has a truth-value absolutely (say, it is true *simpliciter*, or false *simpliciter*) although of course it may also have a truth-value relative to this or that world-state. A proposition *P* and a proposition *Q* are identical if and only if they contain exactly the same information; in particular, if two sentences involve different concepts, they do not express the same proposition. On the other hand, it may or may not be that propositions have constituents, and it may or may not be that

the objects of the so-called propositional attitudes are propositions.¹⁰ The existence of propositions can of course be controverted, but I shall not controvert it.¹¹

Here, a subtler criterion of indexicality suggests itself. If an utterance of an expression *e* has a certain content but it is possible that an utterance of *e* should have a different content, then *e* is indexical. This criterion yields the right result about «this world» without leading to the implausible conclusion about «the author of the *Republic*». If the *Republic* had been written by Xenophon, every utterance of «the author of the *Republic*» would refer to him (at least if it lay in an extensional context) but would have the same content as any utterance of the description has in fact. If one said «The author of the *Republic* bears antidemocratic sentiments» and «Xenophon is the author of the *Republic*», the same propositions would be expressed as are expressed in fact. So we are not entitled to conclude that «the author of the *Republic*» is indexical. On the other hand, if things were different and we lived in another world, then an utterance of «this world» would not have the same content as utterances of «this world» have in fact. For if one said «This world is complicated» and «Natural laws govern this world», one's complete utterances would express the proposition that that world was complicated and the proposition that natural laws governed that world. They would not express the same propositions as are expressed in fact. So «this world» turns out to be indexical. As the subtler criterion indeed seems reasonable, I will adopt it.

A third argument for the indexicality of «actually» presupposes that criterion. The

¹⁰ When Kaplan talks about subsentential linguistic entities of appropriate kinds (utterances, tokens, and in particular what he calls 'occurrences') then by the term 'the content of ...' he means 'the propositional constituent corresponding to ...'. See especially (Kaplan 1989a, 523). I introduced 'content' as a term for utterances that are not complete themselves, and explained 'the content of *u*' as meaning 'the contribution that *u* makes to determining what proposition is expressed by the complete utterance of which it is a part'. This explanation captures essentially the same idea, but rids talk about content of commitment to the view that propositions have constituents.

¹¹ It does not seem possible that an unambiguous utterance (indeed any unambiguous linguistic entity) should express more than one proposition. How could a univocal utterance contain just the same information as a proposition *P*, and also just the same information as another proposition *Q*? It is another issue that an unambiguous utterance may be somehow associated with a number of propositions without expressing them.

argument, which is a variant on one offered by Salmon (1987, 36–37; 1989, 334–335), begins with the claim that when we say «Actually snow is white», the proposition expressed, call it ‘*P*’, is a necessary truth. (The kind of necessity which is relevant in this connection is metaphysical necessity.) If, however, snow were not white, and one said «Actually snow is white», the proposition expressed would be false, and so it would not be *P*, which would be true. Thus the utterance of «actually» would have a different content, and «actually» is indexical.

P is the proposition that actually snow is white. As far as we have seen, it may be that, because of indexicality, «Actually snow is white» is associated with more than one proposition. It does not, however, follow that there is no such thing as *the* proposition that actually snow is white. «I am a philosopher» is indeed associated with many propositions. Still, there is such a thing as the proposition that I am a philosopher. The proposition that actually snow is white is that expressed in reality by every utterance of «Actually snow is white». Likewise, the proposition that snow is white iff actually snow is white, call it ‘*P*’’, is that expressed in reality by every utterance of «Snow is white iff actually snow is white».

The third argument for indexicality rests on the idea that *P* is a necessary truth. But is it? Every proposition contains information about how things are; it is a necessary truth if and only if things are that way of necessity. This is what we mean by calling it ‘a necessary truth’. When we consider a proposition, we can sometimes intuitively find out whether it is a necessary truth. I think it is intuitively clear that *P*’ is a necessary truth. Snow is white iff in reality snow is white; how could things not be that way? It is almost equally clear that *P* is not a necessary truth. Snow is white in reality; things need not have been that way.

Given these intuitions, why are some philosophers prone to accept that *P* is a necessary truth and *P*’ is not? The reason is doubtless that they prefix the word ‘necessarily’ to the sentence ‘Actually snow is white’ and consider the result true, and they also prefix it to the sentence ‘Snow is white iff actually snow is white’ and consider the result false. In fact, ‘Necessarily, actually snow is white’, as well as ‘Necessarily, snow is white iff actually snow is white’, is ambiguous and has one true and one false reading. When we realize that, the reason we had for ignoring the intuitions reported above fades away.

I prefer the following account, which has the merit of respecting the intuitions. The proposition that snow is white iff actually snow is white is a necessary truth; things are like that of necessity. And in order to say that things are like that of necessity, we should construe the ‘actually’ in the sentence ‘Necessarily, snow is white iff actually snow is white’ as pointing back to the ‘necessarily’. If we construe it otherwise, we shall not capture the intended sense. On the other hand, the proposition that actually snow is white is not a necessary truth; things are not like that of necessity. In order to say that things are like that of necessity, we should construe the ‘actually’ in the sentence ‘Necessarily, actually snow is white’ as pointing back to the ‘necessarily’. The phenomenon is analogous to the following imaginary situation: a sentence *S*, which for simplicity’s sake may be supposed to involve no ambiguity or indexicality, is such that when we prefix any sign of negation to it, the resulting sentence has two readings and on the one it expresses the negation of the proposition expressed by *S* but on the other it does not. (Perhaps there is a locution in *S* which, depending on how the resulting sentence is parsed, counteracts or does not counteract the sign of negation.)

The possibility of giving that alternative account of *P* and *P'* shows that the third argument for indexicality is inadequate because it rests on a questionable premiss; we should not take it for granted that *P* is a necessary truth. On the other hand, the view that *P'* is a necessary truth and *P* is not needs further support if it is to be accepted as right and not just as a possibility. So I will argue for it again in Subsection 2.5. Note that there is no room for saying that, just as the sentence ‘Necessarily, snow is white iff actually snow is white’ has one true and one false reading, so the proposition *P'* is a necessary truth in one sense but not in another. Each proposition contains a single piece (or body) of information about how things are. It may or may not be (metaphysically) necessary that things are that way, but there are no two senses in which it may be (metaphysically) necessary.¹²

¹² G. Evans, in his (1979), distinguished between superficial and deep contingency. It may be thought that the distinction indirectly provides two senses in which things may necessarily be this or that way. In fact, however, we do not get two such senses. Evans’s definition of superficial contingency is the following: “A sentence (*Q*) is superficially contingent iff $\ulcorner \diamond \neg (Q) \urcorner$ is true, or, equivalently, there exists

Thus, of the three arguments we discussed for the view that «actually» is indexical, none is satisfactory. One aspect of the semantics usually offered for ‘actually’ has not been adequately defended.

2.4 Whether or not P is a necessary truth, we may ask: if we lived in another world, would utterances of «Actually snow is white» express the proposition P ? Call the totality of all beings ‘ T ’; in essence, what we are counterfactually supposing is that something not identical with T is the totality of all beings.

The answer is easier if we say «Reality is complicated» and discuss the proposition expressed. «Reality is complicated» is the combination of ‘Reality is complicated’ and the meaning which that sentence has when there is no understood restriction to particular aspects of the whole reality. If we lived in a world other than T , would every utterance of «Reality is complicated» express the same proposition as is expressed in fact? It seems to me that the correct answer is clearly, Yes. What both is and would be expressed is the proposition that the world (the totality of all beings) is complicated. Likewise, when we say «Reality is a nexus of material objects», our words contain the same information as they would if we lived in another world and said «Reality is a nexus of material objects»; that is as clear as it is clear that when we say «There could be immaterial objects» (with a metaphysical ‘could’) our words contain the same information as they would if we uttered the same sentential

a world w such that it is not the case that (Q) is true $_w$ ” (211). I have here added a symbol of negation after the diamond because its omission is clearly a misprint. The *definiens* is disjunctive, and the two disjuncts are described as equivalent. Other passages (179, lines 9–11; 199, line 32 – 200, line 1; and 207, lines 6–7) indicate that Evans does not intend the second disjunct as saying anything other than what has been said in the first; the concept of true $_w$ which he has in mind is one deliberately characterized in such a way that e.g. $\lceil \diamond \neg (Q) \rceil$ turns out to be true iff, for some w , it is not the case that (Q) is true $_w$. So the first disjunct has explanatory priority, and we are entitled to focus on it when extrapolating the corresponding notion of superficial necessity: a sentence S is superficially necessary iff $\lceil \Box S \rceil$ is true. But this is just a sense in which a sentence can be called ‘necessary’. It is not a sense in which things may necessarily be a certain way. If S happens to contain a locution that cancels the semantic effect of the box, then $\lceil \Box S \rceil$ may be true irrespective of whether there is any way such that things *must* in some sense be that way.

expression in counterfactual circumstances. «Reality», as well as all its utterances, expresses an identifying condition (one that can also be expressed in a definite description). I think it is the condition of being the totality of all entities. Similarly, if we lived in a world other than *T*, every utterance of «In reality snow is white» would express the same proposition as utterances of it express in fact.

Now, «In reality snow is white» and «Actually snow is white» have the same meaning, so they could not have had distinct meanings. Moreover, it is necessarily the case that all utterances of the former and all utterances of the latter are uttered in contexts that differ in no way relevant to what proposition is expressed. (What might be a relevant way? It is certainly impossible that some utterances should be part of one world and some should be part of another, for it is impossible that there should be more than one world.) Hence, it is necessarily the case that all utterances of «In reality snow is white» and all utterances of «Actually snow is white» express the same proposition. Since in fact utterances of the latter express *P*, in fact utterances of the former also express *P*. Suppose that we lived in a world other than *T*. Then, if there were utterances of «In reality snow is white», they would express *P*, and so any utterances of «Actually snow is white» would also express *P*. Indeed, we can say that if we lived in a world other than *T*, every utterance of «Actually snow is white» would express *P*; it does not matter whether there would be utterances of «In reality snow is white».

The conclusion can be strengthened. We can intuitively see that if things were in any way different than they are in fact (e.g. if *T* were the world but had other traits than it has in fact), every utterance of «In reality snow is white» would express the same proposition as utterances of it express in fact. Hence, by the same reasoning as before, every utterance of «Actually snow is white» would express *P*. In other words, it is necessarily the case that every utterance of «Actually snow is white» expresses *P*. More explicitly, it is necessarily the case that every complete utterance of «Actually snow is white» expresses *P*. Thus what proposition is expressed in a (complete) utterance of «Actually snow is white» does not depend on the extralinguistic context. (As far as we have seen, it may somehow depend on the fact that the utterance is complete.)

So «actually» does not have the alleged primary sense. If it did, its utterances would involve the modal aspects of the context in much the same way as the utterances of «here» and «now» involve the spatial and temporal aspects respectively. Thus what proposition is expressed in an utterance of «Actually snow is white» would depend on the extralinguistic context; it would depend on its modal features. For it is a basic characteristic of «here» and «now» (and other indexicals) that what proposition is expressed in e.g. an utterance of «There are some apples here», as well as what proposition is expressed in an utterance of «The United Nations are now weak», depends on the relevant aspects of the context.

On the other hand, if we lived in a world other than T , utterances of «In this world snow is white» would not express the same proposition as utterances of it express in fact. They would express the proposition that in that world snow was white. What proposition is expressed in an utterance of «In this world snow is white» depends on the extralinguistic context. In order to provide a parallel to the difference between «In reality snow is white» and «In this world snow is white», let me introduce the expression «THESE». Its meaning is captured in the following rule: «THESE» is a plural demonstrative such that, necessarily, whenever it is uttered the utterance refers to all the things there are. Now compare «All things are self-identical» and «THESE are self-identical». Suppose that we lived in a world other than T , and so either one of the things that actually exist did not exist or there existed something that does not actually exist. Then utterances of «All things are self-identical» would express the same proposition as utterances of it express in fact, but utterances of «THESE are self-identical» would not express the same proposition as utterances of it express in fact.

Now, consider an utterance of «actually» that is part of a real utterance of «Actually snow is white», and let c be its content. (If one believes that the utterance of «actually» adds nothing to determining what proposition is expressed, one may say that its content is the zero contribution.) It is necessarily the case that every utterance of «actually» that is part of an utterance of «Actually snow is white» has content c . For if it is possible that some such utterance of «actually» should not have that content, it is possible that an utterance of «Actually snow is white» should not express P . Thus the content of an utterance of

«actually» that is part of an utterance of «Actually snow is white» does not depend on the extralinguistic context—as far as we have seen, it may still depend on the fact that the utterance is part of a (complete) utterance of «Actually snow is white» and so does not point back to another modal operator. Since there is nothing special about the example, the same will go for at least any utterance of «actually» that does not point back: the content of such an utterance does not depend on the extralinguistic context. In the last section of the paper, we shall discuss whether it depends on the linguistic context. If «actually» is indexical, it is a kind of indexical very different from what is usually thought.

2.5 The above considerations can also help us tackle an objection that may be raised against the view that P is not a necessary truth. The objection is simple and involves world-states. Since actually snow is white, it is the case at every world-state that actually snow is white. P is therefore true with respect to every world-state, so it is a necessary truth. And, if so, then P' is not a necessary truth. Just consider a world-state w at which snow is not white. The proposition that snow is white is not true with respect to w , whereas P is. Hence, the biconditional P' is not true with respect to w .

I do not find the objection successful. Let us first, however, make clear what it means to call a proposition *true with respect to a world-state*, or *false with respect to a world-state*. These are relative evaluations of a proposition. They make sense because, at each world-state, things are some way. More specifically, a proposition contains information about how things are. It is true with respect to a world-state w just in case at w things are that way. It is false with respect to w just in case at w things are not that way.

Is P true with respect to an arbitrary world-state w ? One is tempted to turn that question into: Is it the case at w that actually snow is white? In other words, is it necessarily the case that if w obtains, then actually snow is white? However, this approach cannot provide an answer to the original question. For the sentence ‘It is necessarily the case that if w obtains, then actually snow is white’ has two readings, and its truth-value depends on which reading we choose. It is true on the reading on which the ‘actually’ does not point back to the ‘necessarily’, but it may be false on the reading on which the ‘actually’ points back to the

‘necessarily’. (It will be false on the latter reading if at w snow is not white.) P contains information about how things are, and it is true with respect to w if and only if at w things are that way. And the information P contains is that actually snow is white. Still, we cannot find out whether P is true with respect to w by asking ‘Is it the case at w that actually snow is white?’ That approach is inadequate. For the sentence ‘It is the case at w that actually snow is white’ has inherited the ambiguity of ‘It is necessarily the case that if w obtains, then actually snow is white’, and it is not at all clear which one of its readings is relevant to the question whether P is true with respect to w . Once we put the sentence ‘Actually snow is white’ in the scope of the modal operator ‘at w ’, an ambiguity emerges which confounds the approach. The ambiguity would emerge even if the modal operator had been explained differently. So, that approach cannot help us here, and the problem with the objection we are discussing is that it relies on that approach.

Is there any other way to check whether P is true with respect to every world-state? If a proposition contains some information, it could not have contained different information. (By contrast, if a sentence conveys some information, it could have had a different meaning and conveyed different information.) Indeed, it seems that the information that a proposition contains is the proposition itself. P contains some information about how things are. If it is possible that things should not be that way and yet P should be true, then it is possible that P should contain other information than it contains in fact. Since this is impossible, it is necessarily the case that if P is true, things are that way. So, for every world-state w , if at w P is true, then at w things are that way. Therefore, if at w P is true, then P is true with respect to w . We can similarly conclude that if at w P is false, then P is false with respect to w . (The converses of those two conclusions present problems that need not engage us here.)

We can now see another way to check whether P is true with respect to every world-state: try to find one at which P is false. So let me consider a world-state w at which snow is not white but there are utterances of «Actually snow is white». It is clear that at w the utterances of «Actually snow is white» are false. (Imagine what the truth-value would be if snow were not white, but the sentence ‘Actually snow is white’ were used and had the same meaning as it has in fact when e.g. we say ‘Actually snow is white, but it could have been another

colour'.) Moreover, as we have seen, it is necessarily the case that every utterance of «Actually snow is white» expresses P . Thus, at w , the relevant utterances express P . Hence, at w , P is false. But then P is false with respect to w . So not every world-state is one with respect to which P is true. Indeed, it seems that P is false with respect to any one at which snow is not white. For whether P is false with respect to a world-state w does not depend on what utterances there are at w or on whether P is expressed at w .

Similarly, let w' be a world-state at which snow is white and there are utterances of «Actually snow is white». It is clear that at w' the utterances of «Actually snow is white» are true. But, also, at w' they express P . Hence, at w' , P is true. So P is true with respect to w' . Indeed, we may say that P is true with respect to any world-state at which snow is white. (It should not matter that at w' there are utterances of «Actually snow is white».)

Of course, for every world-state w , either at w snow is white or at w snow is not white. And no proposition is both true with respect to w and false with respect to it. A number of inferences can be drawn here. First, P is true with respect to exactly those world-states at which snow is white, and it is false with respect to exactly those at which snow is not white. P is thus true with respect to just the same world-states, and false with respect to just the same world-states, as the proposition that snow is white. Further, the biconditional proposition P' is true with respect to every world-state. The view that P' is a necessary truth and P is not is confirmed.

Now, when an expression like «Actually snow is white» is discussed, it may be tempting to use a conceptual framework that involves associating the expression with a *horizontal* set of world-states and a *diagonal* one. The horizontal set also concerns the world-state, call it ' A ', that obtains. (Assume that, as is to be expected, just one world-state obtains.) The horizontal set associated with «Actually snow is white» is the class of the world-states w such that «Actually snow is white», considered in combination with A , where A plays the role of the context of utterance, is true with respect to w . The diagonal set is the class of the world-states w such that «Actually snow is white», together with w in the role of the context of

utterance, is true with respect to w .¹³ Our conclusions about «actually» can be put in terms of that conceptual framework. It may be thought that the horizontal set associated with «Actually snow is white» is other than the diagonal one; the former comprises all world-states, whereas the latter contains only those at which snow is white. We have, however, seen that what proposition is expressed in an utterance of «Actually snow is white» does not depend on the context; at any rate, it does not depend on the extralinguistic context. So if we combine «Actually snow is white» with any world-state in the role of the context of utterance, the same proposition is expressed. And that proposition is P , since necessarily all utterances of «Actually snow is white» express P . Hence, the horizontal set is the same as the diagonal one: it is the class of the world-states with respect to which P is true. But P is true with respect to exactly those world-states at which snow is white. Hence, the horizontal and diagonal set is their class.

3. *Ambiguity and the Role of 'Actually'*

To address the question whether 'actually' is ambiguous, we need to distinguish between a word, the utterances of that word, and its occurrences. The word is of course a type. Its utterances are acts each of which produces or uses a token of the word. As for the occurrences, each one is also a type and is distinguished from the other occurrences of the same word by the sentence (or phrase) of which it is a part and by its position in that sentence. For example, in 'Actually it is possible that those who are actually rich should be poor' there are two occurrences of 'actually'. If we utter the sentence twice, we shall have four utterances of 'actually'; two of them will involve tokens of the first occurrence, while the other two will involve tokens of the second. We can say that an occurrence of 'actually' is a type less abstract than 'actually' itself.¹⁴

Finding out whether 'actually' is ambiguous becomes easier if we first ask, What is the

¹³ The horizontal/diagonal distinction derives from Stalnaker, but he associates horizontal and diagonal sets with utterances, rather than sentences or sentential expressions. See (Stalnaker 1999, introduction).

¹⁴ When I use the definite article right before quotation marks, I always talk about an occurrence.

role or roles of ‘actually’ in our language? For one thing, when an occurrence of ‘actually’ is not in the scope of any modal operator it lends emphasis or indicates a contrast, such as the contrast between what one is claiming and what one’s hearers find true or probable (e.g. “He’s clearly lying” “Actually, I believe him”). But if that were its only function, ‘actually’ would be no more than an embellishment; it would only effect a stylistic modification to the sentence to which it was added.

‘Actually’ serves a more important function when it occurs in the scope of one or more modal operators. If the relevant occurrence is not bound to any one of them, it neutralizes them as far as the clause it governs is concerned. When we utter the clause, we are talking as if those operators were not present.¹⁵ That is why the sentence ‘It is possible that actually S ’, interpreted in such a way that the ‘actually’ does not point back to the ‘possible’, is materially equivalent to ‘Actually S ’ and thus to S itself. More generally, that is why prefixing a sequence of necessity or possibility operators to ‘Actually S ’ has no effect on truth-value unless the ‘actually’ is bound to one of them. Even if we have a more complicated sentence, e.g. one of the form ‘It is necessarily the case that if p then it is possible that either q or actually r ’, and the ‘actually’ is not bound, it still neutralizes the ‘necessarily’ and the ‘possible’ as far as the clause it governs is concerned: when we reach that clause we are speaking about how things are in fact, whereas just before we were speaking about how it is necessarily the case that they could have been. If, on the other hand, an occurrence of ‘actually’ is in the scope of some modal operators and is bound to one of them, it neutralizes those which intervene between the operator to which it is bound and itself. When we utter the clause governed by that occurrence, we are talking as if no modal operators intervened. That is why the sentence ‘It is possible that it is possible that actually S ’, interpreted in such a way that the ‘actually’ points back to the initial ‘possible’, is materially equivalent to the sentence ‘It is possible that actually S ’ similarly interpreted, and

¹⁵ For a rather similar remark, see (Gregory 2001, 60, lines 37–40). See also (Hazen 1979, 2). When I talk about the clause governed by an ‘actually’, I just mean the ‘actually’ together with the sentence (or occurrence of a sentence) on which it can be seen as operating, e.g. the ‘actually S ’ in ‘It is possible that actually S ’.

thus has the same truth-value as 'It is possible that S '. And if we have a sentence of the form 'It is necessarily the case that if p then it is possible that either q or actually r ' and the 'actually' is bound to the 'necessarily', it neutralizes the 'possible': when we reach the clause governed by the 'actually' we are speaking about how things are necessarily, whereas just before we were speaking about how it is necessarily the case that they could have been.

This function of 'actually' can be captured in a rule. Each occurrence of 'actually' neutralizes all modal operators in whose scope it lies, up to the operator (if any) to which it is bound; it neutralizes them in the sense that when we reach the clause it governs, we are talking as if those operators were not present. That is the rule. It is particularly important from a logical point of view. If 'actually' served no other function, it would certainly be unambiguous. For it would be possible to state its linguistic role in a single rule.

In fact, if we want to give a complete account of what 'actually' means, citing that rule is not enough. We should add two more things. First, 'actually' involves a descriptive, identifying condition. It is the condition that the word 'reality' expresses when there is no understood restriction to particular aspects of the whole reality; 'actually' is a synonym of 'in reality'. That condition is a dimension of what 'actually' means. It is not an additional meaning. For all occurrences and utterances of 'actually' give expression to it. They do so at the same time as they cancel any modal operators that are in the right place to be cancelled. Second, 'actually' can play some stylistic roles (when lending emphasis or indicating a contrast). Stylistic roles, what Dummett (1981, ch. 1) calls 'tone', add a dimension to what a word means, but do not constitute an additional meaning.

'Actually' is not ambiguous. If it were, we could not give a unified and complete account of what it means. The account distinguishes a number of aspects in what 'actually' means, but is unified because those aspects are not distinct meanings. And it does not seem to leave out anything else that might be called a meaning of 'actually'.

The view that 'actually' is unambiguous explains why sentences such as 'Actually snow is white' sound unambiguous. Embedding that sentence in the scope of a 'necessarily' will result in ambiguity, yet we cannot hear any ambiguity in the sentence itself. Sentences in which 'actually' occurs but not in the scope of modal operators seem to present no

multiplicity of meaning as far as ‘actually’ is concerned. If the word were ambiguous, we would expect such sentences to be ambiguous too. If ‘actually’ is univocal, we expect them to be univocal too, as far as that word is concerned.

One can introduce two new words, ‘actually₁’ and ‘actually₂’, that will jointly play the same role as is played in our current language by ‘actually’. Each occurrence of ‘actually₁’ will neutralize any modal operators in whose scope it lies; each occurrence of ‘actually₂’ will point back to a modal operator and neutralize any intervening modal operators; there will be no other semantic difference between ‘actually’ and either of the new words. It is true that ‘actually₁’ and ‘actually₂’ will not be synonymous. It does not, however, follow that ‘actually’ has their meanings and is therefore ambiguous. It seems that ‘actually’, ‘actually₁’ and ‘actually₂’ correspond to three similar but distinct meanings. (The meanings of ‘actually₁’ and ‘actually₂’ are artificially restricted.) Likewise, one can introduce two first-person singular personal pronouns, ‘I₁’ and ‘I₂’, which will only differ in gender (one will be masculine, and the other feminine). The two new pronouns will not be synonymous, but it does not follow that ‘I’ is ambiguous.

The meaning that ‘actually’ has in sentences like (1) or like ‘Snow could have been another colour, but actually it is white’ is also its meaning that is at work whenever an occurrence of ‘actually’ points back to another modal operator. Given my claims about the propositions P and P' , it would be strange if things were different. Take P' . It is expressed when one says «Snow is white iff actually snow is white». Thus we can capture P' using the sentence ‘Snow is white iff actually snow is white’ and giving ‘actually’ the meaning it has in ‘Snow could have been another colour, but actually it is white’. Like any other proposition, P' contains information about how things are. Suppose we want to say that things are like that of necessity. In other words, suppose we want to express the proposition that necessitates P' . I claim that in order to do so, we should construe the occurrence of ‘actually’ in ‘Necessarily, snow is white iff actually snow is white’ as pointing back to the ‘necessarily’. I claim that if we construe the ‘actually’ otherwise, we shall miss the necessitation of P' . It would be strange if we could capture P' using the sentence ‘Snow is white iff actually snow is white’ and giving ‘actually’ a certain meaning, but in order to

capture the necessitation of *P* using the sentence ‘Necessarily, snow is white iff actually snow is white’, we had to give ‘actually’ a different meaning.

Since ‘actually’ is univocal, the ambiguity in ‘Necessarily, if there are ghosts there are actually ghosts’ is not due to a lexical ambiguity in ‘actually’. Still less is it due to a lexical ambiguity in ‘necessarily’. The ambiguity arises from the interaction of the ‘necessarily’ and the ‘actually’. I suggest that this interaction is syntactic. In ‘Necessarily, if there are ghosts there are actually ghosts’ the occurrence of ‘actually’ and the occurrence of ‘necessarily’ may or may not be connected by a syntactic link, a kind of brace that determines how the sentence should be understood. If the suggestion is correct, the ambiguity of the sentence is syntactic.¹⁶

The term ‘modal operators’ in the rule that specifies the cancelling function of ‘actually’ can be construed as including epistemic operators, such as ‘believes that’ and ‘knows that’. The sentences

(8) Peter believes that he is clumsier than he actually is

and

(9) Peter believes that he is loved and admired by people who actually dislike him

have readings on which they do not impute absurd beliefs. If we read either (8) or (9) in such a manner, then the ‘actually’ neutralizes the ‘believes’: when we reach the clause governed by the ‘actually’, we are talking about how things are in fact, not about how Peter believes they are. Nevertheless, when an occurrence of ‘actually’ neutralizes a previous operator, the operator is normally modal in a narrow sense: it is a possibility or necessity operator or one involved in a subjunctive conditional. The sentence

(10) Peter believes that if something is a ghost, then it is actually a ghost

has no reading on which the ‘actually’ neutralizes the ‘believes’. Indeed, it is hardly possible to see what such a reading would be.

¹⁶ For a detailed discussion of definitions and tests of ambiguity, see (Gillon 1990). Evans (1977, 88ff.) assumes that anaphoric pronouns are syntactically linked with their antecedents in sentences such as ‘John loves his mother’ and ‘Some man loves his mother’ and uses a brace notation to represent that link.

It is sometimes said that ‘actually’ is a scope-indicating device. The idea is that in principle we can distinguish between the syntactic and the semantic scope of an operator: its syntactic scope is the clause it governs, whereas its semantic scope comprises the parts of that clause which should be interpreted as embedded in a context generated by the operator. So it is said that when an occurrence of ‘actually’ lies within the syntactic scope of another modal operator, its function is to remove the phrase of which it is a part outside the semantic scope of that operator. For example, in the sentence

(11) It might have been that the person who actually knows most about Sumerian archaeology knew no archaeology at all

the ‘actually’ removes the phrase ‘the person who actually knows most about Sumerian archaeology’ outside the semantic scope of the ‘might have been’. Thus (11) is equivalent to

(12) The person who (actually) knows most about Sumerian archaeology is such that he or she might have known no archaeology at all.

Likewise, in the sentence

(13) There might have been things other than the things that actually exist

the ‘actually’ removes the phrase ‘the things that actually exist’ outside the semantic scope of the ‘might have been’. So (13) is equivalent to

(14) The things that (actually) exist are such that there might have been things other than them.

The main proponents of such views about ‘actually’ are D. Bostock (1988, 360–363) and G. Forbes (1989, 91–102). In (11)–(14) I have adapted the examples offered by Bostock.¹⁷

It is true that the rule which specifies the cancelling function of ‘actually’ may be reformulated in terms akin to Bostock’s and Forbes’s views. We may say that when an occurrence of ‘actually’ lies within the syntactic scope of other modal operators and is not bound to any one of them, it removes the clause it governs outside the semantic scope of those operators. We may also say something similar when an occurrence of ‘actually’ lies

¹⁷ Note that, as the contrast between ‘knows’ and ‘knew’ indicates, the ‘actually’ in (11) does not point back to the ‘might have been’. The occurrences of ‘actually’ in (13) and in (15) and (17) below do not point back either.

within the syntactic scope of other modal operators and is bound to one of them. However, we must be careful about what exactly is removed outside the semantic scope of a modal operator.

If the function of the ‘actually’ in (11) is to remove the definite description outside the semantic scope of the initial possibility operator, then presumably that is also the function of the ‘actually’ in

(15) It might have been that no one ever met the person who actually knows the answer to all philosophical problems.

Yet, when (15) is read in such a way that the definite description is part of what is negated by the negation in the ‘no one’, it is not equivalent to

(16) The person who (actually) knows the answer to all philosophical problems is such that there might have been no one who ever met him or her.

Since there is no person who knows the answer to all philosophical problems, (16) is not true. But, for just the same reason, no one ever meets the person who actually knows the answer to all philosophical problems. And if no one ever meets such a person, it is possible that no one should ever meet such a person. Thus (15) is true on the reading on which the definite description is part of what is negated. Again, if the function of the ‘actually’ in (13) is to remove the plural phrase introduced by ‘the’ outside the semantic scope of the initial possibility operator, then presumably that is also the function of the ‘actually’ in

(17) It might have been that no ghosts were other than the things that are actually ghosts.

Yet, when (17) is read in such a way that the phrase ‘the things that are actually ghosts’ is part of what is negated by the negation in the ‘no ghosts’, it is not equivalent to

(18) The things that are (actually) ghosts are such that there might have been no ghosts other than them.

Since there are no ghosts, (18) is not true. The definite article carries ontological commitment whether it introduces a plural phrase or a singular one. But, *a fortiori*, no ghosts are other than the things that are actually ghosts. So (17) is true on the reading we chose. If the ‘actually’ in (17) removed the plural phrase outside the semantic scope of the possibility operator, (17) would have no reading on which it differed in truth-value from (18).

When an occurrence of ‘actually’ removes something outside the semantic scope of a modal operator, what is removed is the clause governed by the ‘actually’, not a longer phrase. The clause governed by the ‘actually’ in (15) is ‘actually [he or she] knows the answer to all philosophical problems’; the clause governed by the ‘actually’ in (17) is ‘[they] are actually ghosts’. And each clause is removed outside the semantic scope of the initial possibility operator just in the sense that when we utter the clause, we are talking as if the possibility operator had not preceded.¹⁸

Now that we have a clearer grasp of the meaning of ‘actually’, we can also answer another question that arises about the sentences ‘Snow is white’ and ‘Actually snow is white’. I have argued that those sentences, or the corresponding propositions, are true with respect to the same world-states. (So we may say that they have the same truth-conditions.) The question is whether the sentences express the same proposition. It is sometimes thought that they do. This view is normally formulated by saying that ‘Snow is white’ and ‘Actually snow is white’ have the same *assertoric content* but different *ingredient senses*.¹⁹ In other words, when we utter the two sentences by way of assertion, we are making just the same claim. Yet when ‘Snow is white’ has been placed within the scope of a possibility or necessity operator, its contribution to determining what is said in the complex sentence of which it is a part is different from the contribution that ‘Actually snow is white’ makes when we substitute it for ‘Snow is white’ in that sentence. In the terminology I have been using here, the two sentences express the same proposition, but certain utterances of them which are not complete have distinct contents. I think that ‘Snow is white’ and ‘Actually snow is white’ do not express the same proposition. So, when we utter the sentences with assertoric force, we are not making exactly the same claim. The concept of actuality is involved in the latter sentence, but not in the former. Since there is no modal operator in ‘Snow is white’,

¹⁸ That sense of ‘removing’, just like the sense in which I talked about neutralizing, is semantic; it marks the semantic effect of certain occurrences of ‘actually’. This effect need not involve any phrase movement of the kind that is frequently assumed to occur when a syntactic representation of a sentence is derived from another syntactic representation of the same sentence (e.g. when the surface structure is derived from the deep structure).

¹⁹ See e.g. (Stanley 1997, 574–576).

adding the concept of actuality makes no difference to either truth-value or truth-conditions; the concept is latent as it were. Still, there is a conceptual difference, so the two sentences express distinct propositions.

4. *The Near-Synonyms of ‘Actually’*

4.1 The word ‘actually₁’, which was briefly introduced earlier, holds some special interest. For it seems to correspond to the actuality operators (i.e. operators like ‘actually’) that have been studied in an important tradition in modal logic. The tradition began with (Crossley and Humberstone 1977) and continues to this day.²⁰ Let me use the symbol ‘@’ as representative of the actuality operators studied in its context. ‘@’ is informally explained in terms of the word ‘actually’, but the English or quasi-English sentences in which it is used indicate that it is construed as always introducing information about how things are in fact. So it seems reasonable to consider it a synonym of ‘actually₁’. On further reflection, though, one may have some doubts about the parallelism between ‘@’ and ‘actually₁’.

The only semantic difference between ‘actually₁’ and ‘actually’ is that an occurrence of the latter may lie in the scope of a modal operator and fail to neutralize it. So the proposition expressed in ‘Actually₁ snow is white’ is probably that expressed in ‘Actually snow is white’, that is, *P* again. There is probably no room for a difference in the proposition expressed between sentences that result from each other by interchanging ‘actually₁’ and ‘actually’ outside the scope of modal operators. At any rate, there is no room for a difference in truth-conditions. So ‘Actually₁ snow is white’ does not express a necessary truth.

On the other hand, the model-theoretic treatment of ‘@’ may suggest that ‘@(snow is white)’ expresses a necessary truth. Typically, one defines the models in such a way that, in each one, there is a non-empty set of indices (“worlds”) and one of those indices is distinguished (it is “the actual world”). Then the recursive definition of truth in a model *M* includes the following clause:

(C) For every well-formed formula **A** and every index *w* of *M*, ‘@**A**’ is true at *w* in *M* iff

²⁰ See e.g. (Hodes 1984; Gregory 2001; Stephanou 2005).

A is true in M at the distinguished index of M .

As a consequence, if $\ulcorner @A \urcorner$ turns out true at an index in a model, it turns out true at all indices in the same model. (C) gives the impression that if e.g. ‘@ (snow is white)’ is true *simpliciter*, and so it is true with respect to the world-state A , then it is true with respect to every world-state. Under the influence of this impression, one may very well conclude that the proposition expressed in ‘@ (snow is white)’ is a necessary truth.

In fact, the model-theoretic treatment of ‘@’ has no implication about whether ‘@ (snow is white)’ expresses a necessary truth. For the treatment results from a need that is independent of whether ‘@ (snow is white)’ expresses such a truth. We need to validate the principle ‘@ p \supset \Box @ p ’. This formula corresponds to a central aspect of the logic of ‘actually’. As a result, it was made an axiom in (Crossley and Humberstone 1977), and its analogues were validated throughout the tradition that began with that paper. In order to validate the formula, we should make sure that if ‘@ p ’ is true at an index i (in a model), ‘ \Box @ p ’ is also true at i . The standard model-theoretic rule for ‘ \Box ’ invokes an accessibility relation and provides that ‘ \Box @ p ’ is true at an index i iff ‘@ p ’ is true at every index accessible from i . So we should make sure that if ‘@ p ’ is true at i , it is also true at all accessible indices. A simple way to achieve this is to introduce, in each model, a distinguished index and adopt (C). The same effect can be achieved in other ways, such as that in (Gregory 2001, 64–65). Thus, at least within the standard model-theoretic framework for modal logic, validating ‘@ p \supset \Box @ p ’ requires a treatment of ‘@’ that will either incorporate (C) or, at any rate, somehow guarantee that if ‘@ p ’ is true at an index i , it is also true at all indices accessible from i .

However we may guarantee that effect, the impression will be given that if e.g. ‘@ (snow is white)’ is true *simpliciter*, and so true with respect to A , then it is true with respect to every world-state (every maximal possible state of affairs). The impression arises because in modal logic (as practised by philosophers) one expects the model-theoretic rules to reflect the structure of modal reality and its relation to modal idioms. The rules, however, may fail to do so. Indeed, they sometimes have to fail in order to validate the right principles, which is their main task. (It should not be presumed that the same rules can serve both purposes.) In order

not to validate formulae such as $(\forall x)\Box(\exists y)(x = y)$, we allow that the domain of quantification may vary between indices. In order not to validate $\Box(\forall x)@(\exists y)(x = y)$, we even allow that the domain for an index may not be a subset of the domain for the distinguished index. So the impression is given that there are entities which are not part of the actual world. Even well-chosen rules can give a wrong impression.

If one tried to articulate the logic of ‘actually₁’ formally, one could hardly avoid model-theoretic rules to the effect that if ‘actually₁ p ’ is true at an index i , it is also true at every index accessible from i . So the presence of (C) does not go against the view that ‘@’ and ‘actually₁’ are synonyms.

We can take it that things are as they appeared initially: ‘@’ has the same meaning as ‘actually₁’. So ‘@(snow is white)’ does not express a necessary truth. Thus, the usual views about ‘actually’ will not become correct if they are turned into views about its main symbolic counterpart, ‘@’. At least the view that (in reality) the utterances of ‘Actually snow is white’ express a necessary truth will remain wrong.

4.2 We can compare ‘actually’ with ‘in T ’ and ‘in this world’. ‘ T ’ is the proper name we gave to the world (to the totality of all beings). The comparison will both sharpen our understanding of ‘actually’ and show why we should resist a certain temptation. It is tempting to consider that the various semantic and logical features that are usually attributed to ‘actually’ when it is thought to have its primary sense may not apply to ‘actually’ at all, but do apply to the phrase ‘in this world’.

It is quite clear that even if ignore the occurrences of ‘actually’ that point back to another modal operator, ‘actually’ does not mean ‘in T ’. If it did, the sentence ‘Actually there are blue horses’ would mean ‘In T there are blue horses’, and the sentence ‘It is necessarily the case that actually there are blue flowers’, interpreted in such a manner that the ‘actually’ is not bound to the ‘necessarily’, would mean ‘It is necessarily the case that in T there are blue flowers’. But the sentences do not have those meanings.

First, suppose that we lived in a world other than T ; alongside the things that in fact exist, there might exist some more. Also suppose that each one of ‘Actually there are blue horses’

and ‘In T there are blue horses’ had the same meaning as it has in fact. Then, whether ‘Actually there are blue horses’ was true would depend on whether the world we lived in, the whole reality, contained blue horses. But whether ‘In T there are blue horses’ was true would depend on whether T contained blue horses. Hence the two sentences would not have the same meaning. So they do not have the same meaning in fact.²¹

Secondly, the sentence ‘It is necessarily the case that actually there are blue flowers’, interpreted in such a manner that the ‘actually’ is not bound to the ‘necessarily’, is true, since it is equivalent to the simple ‘Actually there are blue flowers’. But ‘It is necessarily the case that in T there are blue flowers’ is false. For T is not a necessary being: if you or I did not exist, T would not exist either. If T did not exist, then it would not be the case that in T there were blue flowers. This is so just as, if Africa did not exist at all, it would not be the case that in Africa there were some deserts, and if the Roman Empire had not existed, then it would not have been the case that in the Roman Empire law regarded slaves as objects. A claim to the effect that things are a certain way within a geographical area or a mereological sum entails that the area, or the sum, exists; so if it did not, it would not be the case that within it things were that way. (And the point extends to other entities, such as empires.) Thus, it might not have been that in T there were blue flowers. In other words, it is not necessarily the case that in T there are blue flowers. Even if we ignore the fact that an occurrence of ‘actually’ may point back to another modal operator, the logic of ‘actually’ is different from the logic of ‘in T ’: prefixing a necessity or possibility operator to ‘in T , S ’ does not always result in a materially equivalent sentence.

We can similarly see that ‘Actually there are blue horses’ does not have the same meaning as ‘At A there are blue horses’. (A is the name I introduced for the world-state that obtains.) For it is possible that things should be different than they are in fact, but each of the two sentences should have the same meaning as it has in fact. Then, whether ‘Actually there are blue horses’ was true would depend on whether there were blue horses. But whether ‘At

²¹ If the name ‘ T ’ is used in a sentence, then it could not have been that the sentence had the same meaning as it has in fact, but was not about T ; and similarly for all names. I find this principle irresistible, but cf. (Evans 1979, 207).

A there are blue horses' was true would depend on whether at *A* there were such horses. (And it may be plausible to accept that if at *A* there are no blue horses, it is necessarily the case that at *A* there are no blue horses.) Hence the two sentences would not have the same meaning. So they do not have the same meaning in fact.

Now, since it is not necessarily the case that in *T* there are blue flowers, it is not necessarily the case that in this world there are blue flowers. For this world is *T*. But the proposition that in this world there are blue flowers (in other words, the proposition expressed in reality by every utterance of 'In this world, there are blue flowers') is a necessary truth if and only if, necessarily, in this world there are blue flowers. For we do not here have the peculiarities of 'actually': when we say 'In this world there are blue flowers', we are saying that things are a certain way, and when we add 'Necessarily, in this world there are blue flowers', we are unambiguously adding that things are necessarily that way. Thus the proposition that in this world there are blue flowers is not a necessary truth.

Among the various points that are usually made about 'actually' when it is thought to have its primary sense, one is that (in reality and for any sentence *S*) if the utterances of 'Actually *S*' are true, then so are any utterances of 'Necessarily actually *S*'. Another one is that if the utterances of 'Actually *S*' are true, they express a necessary truth. The corresponding generalizations about 'this world' may initially sound plausible: (in reality and for any *S*) if the utterances of 'In this world *S*' are true, then so are any utterances of 'Necessarily in this world *S*'; and if the utterances of 'In this world *S*' are true, they express a necessary truth. Both generalizations are, however, wrong. When I say 'In this world there are blue flowers', my utterance is true but does not express a necessary truth, and when I add 'Necessarily, in this world there are blue flowers', my utterance is false. Thus, although the phrase 'in this world' involves indexicality, it lacks some other important features that are normally ascribed to 'actually' when it is supposed to have its primary sense.²²

It is important to note that, except perhaps for 'at *A*', we have found no operator *O* such

²² In terms of the horizontal/diagonal distinction, the horizontal set associated with the sentence 'In this world there are blue flowers' is not the class of all world-states. It contains no world-state at which this world does not exist.

that, for every true sentence S , $\lceil O S \rceil$ expresses a necessary truth and, for every false sentence S , $\lceil O S \rceil$ expresses a necessary falsehood. (A proposition contains information about how things are, and it is a necessary falsehood iff, necessarily, things are not that way.) ‘Actually’ is not such an operator, appearances notwithstanding. Neither can ‘in T ’ play that role, as we have seen: the proposition that in T there are blue flowers is not a necessary truth. Finally, even ‘at A ’ may not fit the bill. For reasons of exposition, I have here assumed that there are maximal possible states of affairs, or world-states. In fact, it is difficult to show that there is any such thing, or that there is any maximal proposition that could be true.²³ If, contrary to what we have been assuming, there are no world-states, then even ‘at A ’ does not have the desirable properties. For in that case, ‘ A ’ is an empty name, so A does not exist. Then, according to a plausible view about empty names, it is impossible that A should exist, so *a fortiori* it is impossible that A should obtain. But then, even if S is a false sentence, $\lceil \text{At } A, S \rceil$ expresses a truth, for $\lceil \text{It is necessarily the case that if } A \text{ obtains, then } S \rceil$ is vacuously true. Again, according to another view about empty names, if ‘ A ’ is empty then the sentences in which it is used lack truth-value and fail to express propositions. But then, even if S is true, $\lceil \text{At } A, S \rceil$ does not express a truth. So it is not clear whether there can be any operator that fits the bill.

5. Indexicality Again

As ‘actually’ is not ambiguous, it corresponds to a single expression, «actually», and every utterance of ‘actually’ is an utterance of «actually». Once this is acknowledged, there is room for a new argument to the effect that «actually» is indexical. I say «I could be a better person than I actually am», and you reply «It might have been that you were essentially evil and could not be a better person than you actually were». My utterance of «actually» refers to the actual world; yours, which is linked to your initial modal operator, does not. Since the two utterances differ in reference but both are seen as part of the actual world (we do not imagine the one taking place in this world, and the other taking place in another world), they do not

²³ Plantinga (1985, 327–329) presents an argument for the existence of possible worlds (in his sense of the term ‘possible worlds’). The argument is refuted in (Menzel 1989).

have the same content. Thus, by the criterion of indexicality which was adopted in Subsection 2.3, «actually» is indexical. Admittedly, it is not the case that some utterances of «actually» differ in content and the content of each depends on the extralinguistic context; «actually» does not belong to the same group of indexicals as «here» and «now». Yet some utterances of «actually» differ in content and the content of each depends on the syntax; «actually» is an indexical rather like «the aforementioned».

I am sceptical about that reasoning. To explain why, I shall consider two utterances of the word ‘itself’. I say ‘Paris is identical with itself’, and you reply ‘Everything is identical with itself’. Do the two utterances of ‘itself’ have the same content? There is an argument to the effect that they do not, and one to the effect that they do. The former begins by pointing out that my utterance of ‘itself’ refers to Paris and to nothing else whereas yours functions like a bound variable and either lacks reference or refers to all things. Hence the two utterances differ in content. For it is necessarily the case that if two linguistic items have the same content, then each one refers to whatever the other refers to. The latter argument starts by remarking that what you said about everything is what I said about Paris. Thus, my utterance of ‘is identical with itself’ and your utterance of the same phrase have the same content. Hence the two utterances of ‘itself’ also have the same content.

Those who think that the utterances of ‘itself’ do not have the same content may claim that the first step in their opponents’ argument is invalid. They may say that, although the utterances of ‘is identical with itself’ do not have the same content, their contents have many aspects in common and this is enough for the truth of the remark that what you said about everything is what I said about Paris. Equally, those who think that the utterances of ‘itself’ have the same content may claim that the difference between them in reference does not imply a difference in content. They may say that the question whether a given utterance of ‘itself’ functions like a bound variable, as well as the question what (if anything) it refers to, is not settled by its content, but by its syntax and the semantic properties of its grammatical antecedent.

All in all, I think that the issue is not sufficiently clear to justify choosing between the two arguments. If so, then neither should convince us. In particular, since we should not be

persuaded by the former argument, we should not be persuaded by the similar reasoning to the effect that our utterances of «actually» differ in content. This difference was inferred from the fact that my utterance of «actually» refers to the actual world whereas yours does not. Just as it may be that the utterances of ‘itself’ have the same content although one of them stands for Paris only and the other does not, so it may be that all utterances of «actually» have the same content although some of them refer to the actual world and others do not. If so, it is only the reference of an utterance of «actually», and not its content, that depends on the syntax.²⁴

Another parallel is provided by definite descriptions such as «the author of the *Republic*». I say «The author of the *Republic* bears antidemocratic sentiments», and you reply «If the *Republic* had been written by someone else in different circumstances, then it might have been that the author of the *Republic* bore no antidemocratic sentiments». My utterance of the description refers to Plato, but yours does not. Does it follow that the two utterances differ in content? It does not seem so. In such examples, it is quite clear that the content is the same.

To sum up, the picture that emerges about ‘actually’ is different from the usual views on it. ‘Actually’ is not ambiguous. One important aspect of its meaning is captured in the following rule: each occurrence of ‘actually’ neutralizes, in a certain sense, all modal operators in whose scope it lies, up to the operator (if any) to which it is syntactically linked. No convincing argument has been adduced for thinking that ‘actually’ is an indexical. Indeed, if it is indexical, it is for reasons very different from those usually offered, and the context it involves is not extralinguistic, but syntactic. We have also seen something else about sentences in which an occurrence of ‘actually’ does not point back to any other modal operator: if such a sentence tells us that things are a certain way, and we want to say that

²⁴ One thing that is clear in the case of ‘itself’ is that our two utterances of that word are utterances of the same expression. For, otherwise, our two utterances of ‘is identical with itself’ are also utterances of distinct expressions. And if the phrase ‘is identical with itself’ corresponds to more than one expression, it is ambiguous. In fact, it is very difficult to regard that phrase as being ambiguous. After all, it corresponds to a single property (self-identity).

things are that way of necessity, we should prefix a necessity operator and link it to the ‘actually’. True sentences of the form ‘Actually p ’ do not generally express necessary truths.*

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