The utility of content-relativism

Paula SWEENEY[†]

Abstract. *Content-relativism* is a semantic theory that states that the content of an uttered sentence can vary according to some feature of an assessment context. This paper has two objectives. The first is to determine which features a motivational case for content-relativism would display—what would a good case for content-relativism look like? The second is to consider cases which appear to have the required features and evaluate their prospects as motivational cases. I identify two varieties of motivational case for content-relativism: *content interpretation* and *content enhancement*. I conclude that only content enhancement cases are likely to motivate content-relativism.

1   Introduction

In 'Demonstratives', 1989, Kaplan gave truth-conditional semantics to accommodate the fact that our language contains sentences that vary in truth-value according to features of the context in which they are uttered. Kaplan highlighted two ways in which the truth-value taken by a sentence can vary. First, a sentence may contain an *indexical*, a term which refers to different things in different situations—for example, 'I', 'you', 'he', 'she' and 'it'—such that what is expressed by a sentence containing such a term can vary. For example, the sentence, *S*, 'I am wearing red shoes today' will say something about Caitlin at the time when she says it and the same sentence will say something about Jodie at the time when she says it. As the truth conditions of

† Department of Philosophy, University of Aberdeen, Aberdeen. Scotland. Email:
p.sweeney@abdn.ac.uk.

S must allow for such differences in truth-conditional content so our semantics reflect the fact that propositional content depends on the semantic values of the *agent* and *time* parameter of the context of utterance and, taking other indexicals into account, also on the *location*, *world*, and, a little controversially, *speakers' intentions*. Sentence-truth requires propositional content which is, we assume for the time being, determined by utterance context.

On the Kaplanian model there is a further way in which the truth-value of a sentence depends on context. Assuming *S* is uttered at w_0, the proposition produced by the utterance is to be evaluated with regard to w_0—it is to be evaluated at the circumstance of evaluation determined by the utterance context. For example, if Caitlin utters *S* in w_0 then the proposition expressed is to be evaluated for truth at w_0. But if *S* contains an *operator* such as the sentence 'I might have been wearing my red shoes today', the operator 'might' determines that the (nonmodal) proposition, *Caitlin is wearing red shoes on 1ˢᵗ January*, is to be evaluated at some world other than w_0. In summary, on Kaplan's theory, sentence truth is doubly relative: to a context (supplying a proposition) and to a shiftable circumstance of evaluation (supplying a truth-value).

There are familiar challenges to Kaplan's theory of sentence truth.[1] *Contextualism* with regard to less obviously context-sensitive terms such as 'knows' and epistemic 'might' has it that the scope of Kaplan's theory of indexicals is too restrictive—that these other terms also vary in content across different utterance contexts. To elucidate with an example, according to contextualism regarding epistemic *might*, an utterance by Joshua of the sentence 'Sancho might be in the

---

[1] I will not motivate the positions here. For more details of and motivation for contextualism see Lewis 1996, Cohen 1986, DeRose 1991, 1992. For more details of and motivation for nonindexical contextualism see MacFarlane 2007, Recanati 2007, Kolbel 2002. For more details of and motivation for truth relativism see MacFarlane 2003, 2005, 2008, Richard, 2008, and Laserson, 2005.

kitchen' generates the proposition *According to Joshua's current body of information, Sancho might be in the kitchen*.

Nonindexical contextualism denies that sentences such as 'Sancho might be in the kitchen' are propositionally incomplete and, in contrast with contextualism, states that the scope of Kaplan's theory is too restrictive when it comes to taking into account ways in which a complete proposition can be true relative to some feature of the circumstance of evaluation. To give an example, according to nonindexical contextualism regarding epistemic *might*, an utterance by Joshua of the sentence 'Sancho might be in the kitchen' generates the proposition *Sancho might be in the kitchen* and the truth of this proposition will vary according to the body of information that Joshua has when he utters the sentence.

Truth-relativists deny that the relevant features for truth evaluation must be those of the context of utterance. According to truth-relativists, propositional truth can be relative to the context of an assessor. To give an example, according to truth relativism regarding epistemic *might*, an utterance by Joshua of the sentence 'Sancho might be in the kitchen' generates the proposition *Sancho might be in the kitchen* and the truth-value of this proposition will vary with the body of information that an assessor has when he or she assesses Josh's utterance for truth.

In summary, there are two ways in which a sentence can vary in truth-value across context. First, the truth-value of a sentence may shift in virtue of a variation in the content of the proposition produced by the sentence. Second, the truth-value of a sentence can vary in virtue of a shift of some feature of the world at which the propositional content is to be evaluated. And there are two varieties of context that each variation can be relative to—those determined by the context of utterance and those determined by a context of assessment. Contextualism, nonindexical

contextualism and truth-relativism mark out three of the four possible variants that can be located within these two bilateral distinctions. The remaining position—*content-relativism*—is to be our focus[2]

A word regarding my methodology: I will assume that utility is a legitimate measure of a theory of context sensitivity. When considering terms with shifty content we need to be able to account, not just for semantic content but also for communicative utility. Against this criteria it is no coincidence that content-relativism has seldom been considered as a serious alternative in the literature for, as an account of context sensitivity, it is hardly intuitively useful. In fact, it would not be far off the mark to say that content-relativism was initially raised as a possibility simply because it was the remaining position in this four-way division of semantic space. [3] To appreciate how unorthodox the theory is, we can consider content-relativism as applied to a sentence containing a standard indexical. Consider again *S*. Content-relativism with regard to *S* has it that a proposition, *P*, produced by Caitlin's utterance of *S* is determined by an assessment context. Any assessment context. So, in addition to producing a proposition about Caitlin at the time of utterance, Caitlin's utterance of *S* in 2012 can also produce the proposition *John is wearing red shoes on 1st January 2030*. Content-relativism is clearly a very bad theory for determining standard indexical content.

---

[2] I will not consider theories of *weak* content-relativism such as those proposed by Cappelen in 'Content Relativism' in Kolbel and Garcia-Carpintero (eds.), 2008 *Relative Truth* in which the character of a term or sentence supplies a broad meaning which assessors can then sharpen within their respective contexts.

[3] Although, see Egan, Hawthorne and Weatherson, 2005, in which content-relativism is taken to be a serious contender and Weatherson, 2009, in which content-relativism is applied to subjective conditionals. Andy Egan's, 2009 defense of content-relativism is discussed in detail in section 2.

What possible use could we have for terms, the content of which is left wide open for reinterpretation? We like to have control over the things we say partly because one is liable for the propositions that one produces and held responsible for the non-linguistic knock-on effects. If there are terms in natural language which bring about variation in sentence truth across situations we would expect there to be a norm securing control over the content that the utterances of such sentences produce. In cases where the norm seems unhelpfully restrictive we must point to something peculiar in the area of discourse in question to motivate a departure.

Furthermore, if content-relativism is to be plausible at all, it had better be the case that the content of such terms being fixed by someone other than the speaker is no bar to successful communication. Consider standard indexicals. Shifting the relevant feature of context that fixes the content of a standard indexical term shifts the meaning. Consider *S* again:

S: I am wearing red shoes today.

Shift the value of a content-fixing parameter and the meaning expressed by the sentence will be entirely different. The usefulness of content-shifting terms like 'I' and 'today' is partially dependent on this content-shifting feature. But it is also partially dependent on the fact that the value of the content determining features of context are generally transparent, not only to the speaker but also to interlocutors. In situations where these features are not transparent competence dictates that one should avoid using an indexical and use an invariant term instead. To exemplify, when one says 'Hello' on the telephone and the interlocutor replies with "Who is that?" it is unhelpful to reply with 'It is me!' Likewise when lost in the woods one should not text one's rescuers with 'I am here!'. Note that the inappropriateness of these responses can not stem from 'It is me' and 'I am here' expressing semantically

incomplete propositions, for complete propositions are produced, the problem is that the content could not be grasped by an interlocutor because the relevant features of the context of utterance are likely to be opaque to her.[4]

So, the utility of indexicals is a combination of semantic and pragmatic features. Indexicals work by picking up on features of context but this semantic fact is not in itself sufficient to explain their usefulness in natural language—we must add the fact that such features of context are generally transparent. The pragmatic feature is relevant to the semantic account. Kaplan's semantic theory is *persuasive* because it dovetails with an implicit pragmatic theory, supplied above, to account for the usefulness of indexicals. Without the supplementary fact that features of context are generally transparent, Kaplan's theory would in no way explain the role of indexicals in natural language.

Applying the same criteria to content-relativism we require the account to be one that may be pertinent to successful communication. But in what area(s) of discourse would content-relativism be useful?

Given the attributes of content-relativism, an area of discourse which would provide motivation would be one with the following features. First, the truth-value of sentences in this discourse would intuitively vary across contexts. (But this is not a sufficient feature as each of our four theories accommodates this.) Second, the variation of truth-value of the sentence uttered is a result, not simply of variability in certain features of the world at which the proposition is to be assessed for truth (nonindexical contextualism and relativism accommodate this), but of some term or terms in the sentence being, in some aspect, incomplete and requiring the value of a

---

[4] This is not to foreclose on the idea that there might be widespread 'semantic blindness'. Contextualist solutions to puzzles and paradoxes generally proceed precisely through positing unnoticed context-shifting. The point is rather that, in those cases, the context sensitivity is only motivated to the extent that it can provide a reasonable response to the paradox in question.

parameter of context to fix the content of the proposition expressed (contextualism gives us this.) Finally, the discourse in question must be one in which it would be at least useful, if not necessary, for the propositional content of a sentence to be fixed, not by the context in which it was uttered but by some alternative context(s) all together.[5]

It may seem very unlikely that such a discourse would have evolved—that we would be involved in a linguistic practice in which we are responsible (in the sense that one is responsible for the things one says) for contents that are entirely out with our control. However, I identify two distinct categories of motivational case for content-relativism. The first kind of case is one in which it would not be a mark against the utility of a term were its content not settled once and for all by utterance context but left for interpretation by different agent, because the context of another agent is equally well suited as the speaker's context to settle content. I will call such motivational cases for content-relativism *Content Interpretation*. Under this banner I consider but ultimately reject recent motivational proposals put forward by Egan, 2009.

The second kind of motivational case I consider is one in which a speaker makes an assertion in full knowledge of the fact that her utterance context is in some sense deficient and that there is another—to her, practically inaccessible—context which would be preferable in determining the content of the proposition she expresses. I will call these variants of motivational cases for content-relativism *Content Enhancement*.

2 Content Interpretation: 'You' need not be so sensitive

---

[5] Of course, it could be that the assessment context and the utterance context coincide but the distinctive features of content-relativism are shown only when they come apart.

Egan, 2009, presents us with a series of cases in favour of content-relativism for some standard indexicals.[6] In *Billboard* Horton produces a billboard on which is written the sentence, 'Jesus loves you'. Frank and Daniel each drive past the billboard and read it. We are to have the intuition that the propositions expressed are the singular propositions, *Jesus loves Frank* and *Jesus loves Daniel*. However, according to Egan, the standard Kaplanian model, in limiting us to content determining features of the context of utterance, restricts us to a group proposition of the form *Jesus loves G*, where *G* is the group that Horton has in mind in the context of producing the billboard.[7]

Billboard is a complicated case. It involves multiple 'non-standard' features of communication—for example, (i) the utterance preparation context is distinct from the utterance context (ii) the utterances are deferred (taking place at some later stage from the communicative intention) and (iii) the referent of 'you' is to vary across many different situations. Although features (i) and (ii) of Billboard are semantically irrelevant they are potentially confusing. It will prove fruitful to focus first on another case given by Egan, Sermon, which highlights feature (iii), before returning to Billboards. In Sermon, Horton calls out 'Jesus loves you' to an audience including Frank and Daniel. Again we are to have the intuition that Horton has expressed singular propositions to each member of the audience. And, again, according to

[6] I do not consider all of Egan's cases here but consider what I take to be the most prominent cases. The 'billboard' cases are a variation of what are known as 'answering machine cases'. For an in-depth discussion of answering machine cases, including a discussion of how they differ from these 'billboard cases', a survey of the various responses in recent literature, and a statement of my own response to answering machine cases, see Sweeney, *forthcoming*.

[7] Contrary to Egan's claim it is not obvious that what is expressed (nor what we *take* to be expressed) in these cases is a singular proposition. However, I grant Egan this assumption for the sake of argument.

Egan's interpretations of the Kaplanian model, Horton can only have expressed a general proposition.

As I pointed out in Dodd and Sweeney, 2010, (i) is unproblematic. There are many nonstandard forms of communication, where 'standard communication' is talking face-to-face with one's interlocutor, which involve an initial stage of preparation of a communicative tool—a recorded message or a sign—and where the intentions of the manufacturer of the tool are semantically irrelevant. Where we require an agent to supply intentions for some indexical the relevant individual is one with the communicative intention (i.e. the individual who wanted to communicate something via the billboard) and that need not be the individual who paints the billboard. (ii) is also unproblematic for Kaplanian semantics, as demonstrated in Dodd and Sweeney, 2010, and Sidelle, 1991, and as Egan, 2009: 256-9, explicitly accepts. The tricky feature of Billboards is (iii). It is (iii) that provokes any content-relative intuitions we may have. The difficulty in (iii) lies in two components. First, the sentence in Billboard contains an indexical term that requires speaker's intentions to fix reference and, second, we require multiple singular propositions.

Egan's challenge to the Kaplanian model is that it cannot give us the multiple singular propositions that we need. But Egan reaches this conclusion by running two apparent restrictions or limitations together. The first is that the Kaplanian model restricts us to one utterance per context. The second is that we cannot get the intuitively right content(s) from the agent's context.

First, how does the Kaplanian model restrict us to one proposition per context? It cannot be that Egan takes the Kaplanian model to restrict us in the following way:

ONE SENTENCE/ONE CONTENT: The Kaplanian model prohibits a single sentence from expressing different contents to different individuals. So the sentence 'Jesus loves you', cannot be used to express the propositions *Jesus loves Frank* and *Jesus loves Daniel*.

Clearly ONE SENTENCE/ONE CONTENT is false. The role of the theory of indexicals given by Kaplan is precisely to explain how a single sentence can express different contents. Perhaps we are restricted by the following principle:

ONE SENTENCE-IN-A-CONTEXT/ONE PROPOSITION: Kaplanian semantics demands a one-to-one correspondence between a sentence-in-a-context and a proposition.

If this is correct and we are faced with cases in which intuitions demand that the sentence express many different propositions relative to a given context of utterance, it might be thought that the Kaplanian model is too restrictive. However, we can grant ONE SENTENCE-IN-A-CONTEXT/ONE PROPOSITION without concluding that the Kaplanian model is too restrictive.

Our temptation to take ONE SENTENCE-IN-A-CONTEXT/ONE PROPOSITION to be overly restrictive is due to our having confused it with the following (false) nearby principle:

ONE SENTENCE-IN-A-CONTEXT-OF-UTTERANCE/ONE PROPOSITION: The Kaplanian model demands a one-to-one correspondence between a sentence-in-a-context-of-utterance and a proposition.

This principle says that, for each act of utterance there will be one concrete utterance situation and therefore, one proposition expressed. But Kaplan distinguishes *contexts-of-utterance*—concrete situations in which utterances can occur—from *contexts*—a formal sequence of parameters (Kaplan, 1989b: 591). And there is nothing in Kaplan's theory to stop there being more contexts (in his technical sense) and hence more sentences-in-contexts, than there are utterances. In fact, Kaplan explicitly claims that his theory allows for just that;

> I have sometimes said that the content of a sentence in a context is, roughly, the proposition the sentence would express if uttered in that context. This description is not quite accurate on two counts. First, it is important to distinguish an utterance from a sentence-in-a-context. The former notion is from the theory of speech acts, the latter from semantics. Utterances take time, and utterances of distinct sentences cannot be simultaneous (i.e., in the same context). (1989a: 546)

The point is that the practical limitations of making an utterance need not place limits on the semantic notion of a sentence-in-a-context. One cannot actually utter both 'I am hungry now' and 'I am tired now' at the same time. But all that follows from this is the fact that the propositions generated by each sentence where the context is held fixed, will never actually be produced by one's utterances. Bill could certainly hold up two written signs simultaneously, one declaring 'I am tired now' and the other declaring 'I am hungry now' and thereby produce the propositions *Bill is hungry at t* and *Bill is tired at t*.

Perhaps, then, the concern that motivates Egan is that we cannot get the intuitively right content(s) from the agent's context. The fact that Egan employs interpreters' contexts to fix the value of 'you' (to themselves) indicates that he believes, maybe because the propositions expressed include members of the audience, that we need interpretation sensitivity to fix content. If this is Egan's assumption, it is based on a misunderstanding.

The directing intentions of the speaker fix the value of 'you'. Certainly, in a standard case, it would be very odd to think that it is the job of the person who may be the intended referent to fix the reference of a given use of 'you'. If each person who heard one uttering a sentence containing 'you' could reasonably interpret it to be about them we would be responsible for saying all sort of false and potentially awkward things.[8] It is very counterintuitive to think that the referent of 'you' in a standard case is fixed in this way.

Generating multiple propositions from a sentence containing 'you' requires multiple directing intentions. So the final hurdle for the Kaplanian theory regards whether or not it dictates that directing intentions are to be restricted to the singular. If directing intentions are not restricted to the singular then Egan's cases offer no motivation for content-relativism.

In 'Afterthoughts' Kaplan considers this very question;

The same demonstrative can be repeated, with a distinct directing intention for each repetition of the demonstrative. This can occur in a single sentence, 'You, you, you and you can leave, but you stay' or in a single discourse, 'You

---

[8] Just think of the trouble you could get into by saying 'I love you' to your partner in a crowded room.

can leave. You must stay.' Such cases seem to me to involve an exotic kind of ambiguity, perhaps unique to demonstratives.

He continues,

> The meaning of a demonstrative requires that each syntactic occurrence be associated with a directing intention, several of which may be simultaneous. And if it happened to be true that we never held more than one such intention simultaneously, that would be the mere technicality. In fact, it is not true. In the aforementioned cases ('You, you, you, and you…'), in which there is simultaneous perception of all addresses, I think it correct to say that [there] are several distinct, simultaneous, directing intentions, indexed to distinct intended utterances of the demonstrative 'you' (which are then voiced one at a time). The basic fact here is that although we must face life one day at a time, we are not condemned to perceive or direct our attention to one object at a time. (1989b: 587)

Neither a context of use (situation) nor a context (in the technical sense) is limited to a single directing intention. Granted, Kaplan's example is not entirely analogous with Sermon. In Kaplan's example the sentence contains many occurrences of 'you'. In Sermon the sentence contains just one occurrence of 'you'. Nevertheless, what Kaplan's example does demonstrate is that there is no barrier to an agent holding many directing intentions simultaneously.

There are, at least, two options available to the Kaplanian. First, the sentence 'Jesus loves you', combined with the one context of many directing intentions, generates a very long proposition of the form, *Jesus loves Frank, Bill, John, Tom* …etc. The speaker intends to refer to each member of he audience individually but

the 'you, you, you, you….' are simply too numerous to mention. Still the directing intentions are there! So when 'you' is uttered it is directed to each of the intended addressees, generating the very long proposition.

Second, given that Kaplan's theory allows an agent to have multiple simultaneous directing intentions, and given the agent's intention to communicate a singular proposition to each member of the audience, we say that, although there is only one context of utterance (context in the situation sense) there are many contexts (in the formal sense). That is, Horton's intention to communicate many singular propositions plus his many directing intentions supplies the following contexts:

<Horton, t_1, l_1, directing intention: John>

<Horton, t_1, l_1, directing intention: Frank>

<Horton, t_1, l_1, directing intention: Bill>

<Horton, t_1, l_1, directing intention: Tom>

<Horton, t_1, l_1, directing intention: …>

generating the following context/sentence pairs:

Jesus loves John

Jesus loves Frank

Jesus loves Bill

Jesus loves Tom

Jesus loves …

Either way, it is clear that Sermon provides no motivation for content-relativism.

Now that we are clearer on the possibility of multiple directing intentions, we are better equipped to return to Billboard. Imagine that Horton lives in a small town where the inhabitants stick to a very precise routine. Every day only John, Bill, Frank and Tom drive past the billboard in the order that their names are listed above. Horton, who wants to tell each individual who reads the billboard that Jesus loves them, makes a fancy electronic billboard that 'says' *Jesus loves John* when John drives past, *Jesus loves Bill* when Bill drives past, and so forth. No need for audience sensitivity here. But as there are no indexicals involved there is no need for any theory of context-sensitivity.

Now consider a slight variation. We are in the same town. Horton forms the same intentions to communicate with John, Bill, Frank and Tom. But he does not have the funds for the fancy sign, so he makes a 'Jesus loves you' sign with the firm intention of communicating to each of John, Bill, Frank and Tom, that Jesus loves them. Horton formed the intention to express a bunch of singular propositions. If we allow Horton to use the token 'Jesus loves you' to express the singular proposition just to John, surely he can re-use the same sign to express singular propositions to each of the others.

Consider this final variation. Horton lives in a much bigger town. He does not know each of the inhabitants, but he knows that, for each individual living in the town, Jesus loves that individual. And Horton wants to communicate this to each individual. But he has no money whatsoever. Not even enough to make a 'Jesus loves you' sign. So Horton stands at the side of the road and, to every person who passes by Horton shouts 'Jesus loves you!'. Once again, there is no need for audience sensitivity.

What makes this last case so different from Billboard?[9] Given the distinctions I have made and the fact that the mechanisms of utterance production are semantically irrelevant, there is no semantic difference between the situation where Horton shouts to each individual and the situation where, via Horton's preparation and intention, the billboard 'tells' each individual that drives past that Jesus loves them. So why would we need content-relativism in one case but not in the other? We do not.

In summary, neither Billboard nor Sermon provides motivation for content-relativism. In section 3 and 4 I turn to content enhancement cases.

3 Content Enhancement I: epistemic modals

There is a use of 'might' which seems to convey something like 'given information base I, P is possible'. For example, when asked where Fred is, Ginger replies,

> M Fred might be practicing his Rumba.

What Fred is actually doing is irrelevant to the truth-value taken by an utterance of M. That it, the fact that Fred is practicing his Tango does not make Ginger's assertion false. What *is* relevant to the truth-value of M is whether Fred practicing his Rumba is compatible with some body of information. At first glance it seems as if Ginger's claim is true if it is compatible with her own body of information, motivating either contextualism or nonindexical contextualism. But truth-relativists have pointed to the following form of retraction to motivate the view that epistemic modals are

---

[9] Note that Horton need not have *de re* thoughts about his intended referent: it is enough that he intends to refer to whoever it is that drives past him/reads the sign.

assessment sensitive (see MacFarlane, 2006, and Egan, Hawthorne and Weatherson, 2005):

Ginger	Fred might be practicing his Rumba.
Bing	No, I just saw him having his lunch.
Ginger	Oh, I guess I was wrong.

According to the truth-relativist the fact that Ginger can truly make the modal assertion and then truly claim that this assertion was false is evidence in favour of truth-relativism.

Let's step back and ask, what is the purpose of asserting an epistemic modal claim? Not always, but typically, these assertions take place in a context where the purpose is to reach a non-modal fact, in this case regarding Fred's current activities. Call such a proposition P. Intuitively, competent assertion of the modal claim requires that you neither know P to be true nor know P to be false. But you do know that there is an information state that would settle the matter once and for all—namely the information state which contains either P or *not-P*. Reaching that information state is often the ultimate aim of the modal assertion.

It is true that this aim is not explicitly expressed. Explicitly the modal assertion simply supplies information regarding what is compatible with (at least) the speaker's body of information. But, given the aim of a modal assertion, it seems plausible that, in addition to modal assertions giving information about the speaker's information state, they also request information of others. Loosely stated, it would not be far of the mark to interpret the pragmatic effect of a modal assertion as being *Here*

is my information state—what is yours?[10] And, somewhat peculiarly, the best information state in terms of reaching the aim will be one that contradicts the speaker's, because only that state will narrow the information base and get you closer to your aim: discovering whether or not *P*. Think of it this way: if all of your interlocutors agree with your modal claim you may be no closer to knowing whether or not *P*; all you would know is that *P* is compatible with all of their information states. On the other hand if someone disagrees with you then the worlds in which Fred is practicing his Rumba are no longer possibilities and progress is made.

If epistemic modal claims are content-relative an assertion of *M* by Ginger would produce the following propositions:

(*Compatible with Ginger's information state*) *Fred is practicing his Rumba*

(*Compatible with information state X*) *Fred is practicing his Rumba*

where X is an assessor of Ginger's assertion.

Suppose that Bing overhears Ginger's assertion—an assertion which he interprets as (*Compatible with Bing's information state*) *Fred is practicing his Rumba*—and Bing happens to know that Fred is having lunch right now. Bing will assess this proposition as false. Ginger's utterance has produced a false proposition. (It also produced the true proposition corresponding to her own information state.) Bing is likely to respond to Ginger's assertion with the pronouncement that it is false and that, in fact, Fred is having lunch. And the ultimate aim of the discourse, to reach the truth of the non-modal claim, is achieved.

---

[10] One might think that, given the aim of assertion of a modal it is mysterious that one does not simply ask 'Where is Fred?'. But notice that on the model described here the modal claim has more utility than the question as it gets across *two* pieces of information, (i) the speaker does not know where Fred is and, (ii) the speaker's information state does not rule out Fred practicing his rumba.

The standard contextualist cannot achieve this result because, according to the standard contextualist, Ginger's assertion only produced the proposition *(Compatible with Ginger's information state) Fred is practicing his Rumba*, and *that* proposition will be true at all contexts. The nonindexical contextualist cannot achieve this result because the truth of the invariant proposition is fixed by her utterance context so, again, the proposition *Fred is practicing his Rumba*, as asserted by Ginger, is true at the fixed evaluation context.

The truth-relativist can accommodate the data. According to the truth-relativist, Ginger's assertion of the invariant proposition is true relative to the information state of an assessor. So, it will be true as assessed by Ginger and false as assessed by Bing. On hearing Ginger's utterance of the invariant *Fred might be practicing his Rumba*, Bing will assess it is false, will pronounce it so and, again, the ultimate aim of the discourse is achieved.

However, what is peculiar on the relativist picture is that, from the later perspective of *t'*, Ginger cannot assess her earlier utterance as having been true. That is, according to the truth-relativist semantics, from the later perspective, retraction is *the only* appropriate response. It is far from obvious that this should be the case. To motivate the intuition that Ginger need not retract consider a situation in which Ginger is challenged for making her modal claim.

Ginger: Fred might be practicing his Rumba.

Bing: No, I just saw him having his lunch. So, why did you say that?!

Ginger: Because it was true! For all I knew then he might have been practicing his Rumba.

That is, either (although perhaps not both) of the responses below seem appropriate from Ginger's updated context of assessment:

Ginger-1 Oh, I guess I was wrong.

Ginger-2   Well, it was still true that he might have been practicing his

      Rumba.

The truth-relativist is correct to point out that retraction is an appropriate response but it would also be appropriate for Ginger to respond by saying that what she said earlier was true given what she knew then. While the truth-relativist can agree that, from the later perspective, Ginger's earlier assertion was appropriately made, she cannot account for the fact that it was appropriate made *because it was true*. To clarify, the truth-relativist assumes that we only stand by utterances that we assess as being true. The earlier utterance is false as assessed from the later context. Note that it is not simply that it *would* have been false if asserted now, but that, as assessed now, it *was* false as asserted back then. As such the truth-relativist is committed to retraction. However, from the same assumption that we only stand by utterances that we take to be true, content-relativism can accommodate both retraction and non-retraction as, according to content-relativism, Ginger's utterance produced the following propositions:

(1) *(Compatible with Ginger (t) information state) Fred is practicing his Rumba.*

(2) *(Compatible with Ginger (t') information state) Fred is practicing his Rumba.*

  (1) is (eternally) true and (2) is (eternally) false.

In summary, it is claimed that epistemic modals display the following features: (i) speakers are aware that a context other than the utterance context is superior in terms of reaching their aim, (ii) retraction of claims from an improved information state is appropriate and (iii) pointing out, even from the improved information state, that the proposition produced was—not just excusable—but excusable because true relative to the impoverished information state, is appropriate.

(i) offers pragmatic support for content-relativism for modal claims: it makes sense for us to be willing to let go of the content of our assertions in this discourse. Our practice of retraction, (ii), indicates that the content of our earlier utterances varies with our assessment context, while (iii) shows that the content asserted relative to our utterance context is still available from a later assessment context that we occupy.

In as much as accommodating (i), (ii) and (iii) is desirable, then epistemic modals offer a motivational case for content-relativism.

4 Content Enhancement II: future-contingents

MacFarlane, 2003, used a puzzle concerning future-contingents to motivate truth-relativism. The puzzle was one of apparently conflicting intuitions regarding the truth-value of an assertion about some future event. Consider an assertion of the sentence 'There will be a heat-wave this summer'. Call this sentence *FC*. It seems that an assertion of *FC* is truth evaluable. Certainly at the end of the cold, wet summer one will be prone to admitting that one's early assertion was false. At the same time it seems intuitively appealing to think that the future is not presently settled—that it is not currently settled that there will be a heat-wave this summer: that the matter is as yet undetermined. In order to accommodate this indeterminacy as more than just an

epistemic indeterminacy resulting from our lack of omniscience regarding future events, we will follow MacFarlane (and others—see Belnap et al 2001) and think of each possible way that the future could be as an equally real 'world', overlapping at the moment of utterance. That is, in order to accommodate strong, objective indeterminacy we will introduce a metaphysical framework on which there are at least two equally real possible futures overlapping at the moment of utterance—one on which there is a heat-wave this summer and another on which there is not. [11] Due to this unsettledness we have the intuition that my heat-wave assertion is *indeterminate* in truth-value at the time of utterance—it is *neither* true nor false: this is the indeterminacy intuition. However, according to MacFarlane, we also have the intuition that the very same utterance has a *determinate* truth-value— it is *either* true or false—from some later perspective after the event has or has not taken place: this is the determinacy intuition.

MacFarlane claims that any solution to the problem of future contingents must respect both the determinacy intuition and the indeterminacy intuition. However, to respect both of these intuitions is to say that the truth of the sentence uttered is relative to the context in which the utterance is being *assessed*. Adapting Belnap's double time reference semantics MacFarlane claims that his theory supplies the truth-values required to match our conflicting intuitions.

---

[11] The puzzles of future contingents that I am concerned with here rest on an unusual metaphysical framework—a branching world model combined with a b-theoretic model of time. There are independent motivations for such a framework, outlined in detail in Sweeney, *forthcoming*. For the purpose of this paper we will simply take the framework as an assumption—one that is required to get MacFarlane and Belnap's puzzles off the ground.

Double time reference semantics (Belnap, 2001b: 1-22): S is true [false] at a context of utterance u and context of assessment a iff S is true [false] at every point m/h such that

m = the moment of u

h passes through m and (if the moment of $a>m$) through the moment of a as well.

We evaluate S with respect to the moment of initialisation (i.e. utterance) and all of the histories passing through both that moment *and* the moment of assessment. Idealising contexts u and a as moments we get the following results.

(i) At $u = m_0$ and $a = m_0$, S is neither true nor false. This is because we must look at both histories, h_1 and h_2, as both histories pass through the context of assessment.

Truth-relativism may be adequate in accommodating our conflicting intuitions regarding the truth-value of the utterance in question. However, it leaves unaddressed a further problem of future-contingents—that of explaining why such sentences are assertable in the first place, given that they are indeterminate, not only in truth-value but also in content. This is the primary problem that Belnap et al are concerned with in Facing the Future, 2001.

Future-contingents appear to be assertable yet, as the context of utterance holds more than one possible future the propositions expressed by future-contingents cannot take a truth-value at all—not even a 'third' truth-value such as indeterminate. They are open-sentences. And, as Belnap points out, open-sentences such as 'It is pink', uttered

in a context where there is no object to be supplied for the variable, are unassertable.

Notice that both Belnap et al and MacFarlane assume that the propositional content of the asserted sentence *Lightening will strike the clock tower tomorrow* will remain the same regardless of whether we occupy a b-branching world or not. And they assume that the standard Kaplanian semantics will have no problem delivering such a content. This assumption is up for challenge.

'Tomorrow' is a directly referential term. The Kaplanian linguistic rule for determining the content of an utterance of 'tomorrow' is (something like) *the calendar day after the day of the assertion*. But, given the branching framework, this linguistic rule does not fully determine a referent for each context. If we occupy a branching world and we do not take history to be relevant to the content of 'tomorrow' there can be no unique content to a given use—no unique event that a given occurrence of 'tomorrow' refers to.

The problem is that 'tomorrow', 'in two weeks', 'next year' and so on are pure indexicals—when such terms appear in a sentence they must refer to a unique event in order for the sentence to become fully propositional. (This is not the case with the other target terms of MacFarlane's assessment sensitivity such as 'tasty', 'knows' and 'might'. These terms refer to *properties*—tastiness, knowing, epistemic might—and properties which are arguably instantiated relative to a taster, knower or epistemic agent.) Yet, in order for an utterance of a sentence containing an indexical such as 'tomorrow' to refer to a unique event, in order for such an utterance to generate a unique propositional content, something must be said about the content fixing significance of the history of utterance. As 'tomorrow' is an indexical—a term for

which truth-variation is a result of *content*-variation—we cannot simply assume, as MacFarlane does, that variation in the history of context is not relevant to the content of a given occurrence of the indexical. MacFarlane is right that we have the indeterminacy intuition and the determinacy intuition. But they are intuitions of variable *content*, first and foremost.

As emphasised above, there is, in Kaplan's semantics, no bar to having partially overlapping formal contexts: we can accept that there are (at least) two overlapping formal contexts in play: one for each admissible history.

If this is correct then Belnap was mistaken in thinking that, according to Kaplan's semantics, there can be no unique history of the context. In our world as described, there is no unique history of the *context of utterance*, but this is of no relevance to our formal semantics and is compatible with there being multiple content-fixing contexts of assessment.

If branching time is actual then the character of a future looking term such as 'will' should reflect the branching framework in the following way: the utterance of the future contingent generates, not an open sentence or indeterminate proposition, but two, closed, determinate propositions, each necessarily true or false relative to all histories of evaluation.

<div style="padding-left:2em">

Situation m_0:   'Lightning will strike the church spire tomorrow.'

Formal contexts: $\langle location_0,\ world_0,\ time_0,\ history_1 \rangle$

</div>

$$\langle location_0, world_0, time_0, history_2 \rangle$$

Propositions: Lightning will strike the church spire at $t+$ *1 day*/h_1.

Lightning will strike the church spire at $t+$ *1 day*/h_2.

As the semantics predicted, the referent of '*the* proposition produced by the utterance' is indeterminate, leaving utterance-truth indeterminate. But *sentence*-truth is, contrary to Belnap and MacFarlane, entirely determinate.

In we adapt the character of forward looking indexicals to reflect the branching nature of the future then an adequate semantic theory for accommodating future contingents falls out of Kaplan's semantics. If we occupy a branching world our utterances of future contingents sentences generate countless propositions. In such cases we are likely to be confused regarding the content of our *utterances*. But, although this is an unwelcome consequence, it is only to be expected in a world as radically indeterminate as the one described.

5 Conclusion

In conclusion, we identified two forms of putative motivational case for content-relativism: content interpretation cases and content enhancement cases. We considered a content interpretation case from recent literature and concluded that it did not provide motivation for content-relativism. It may be that some other as yet unconsidered area of discourse does provide content interpretational motivation for

content-relativism. However I think it is more likely that, given the stipulated nature of the content interpretational cases—that another context will be just as suitable as the speaker's context—a move away from the 'just as suitable' speaker's context will be difficult to motivate. I then considered two different content enhancement cases— cases for which the speaker's context is in some way impoverished and an alternative context is better equipped to provide content. I concluded that in cases where such conditions are met—and there may be more cases than the two I have considered here—there are reasons to prefer content-relativism over other models of context sensitivity. [*]

REFERENCES

BELNAP, N. D., PERLOFF, M., & XU, M. 2001: *Facing the Future: Agents and Choices in our Indeterminist World*. Oxford University Press: USA.
COHEN, S. 1986: "Knowledge and context", *The Journal of Philosophy*, 83: 574-583.
DEROSE, K. 1991: "Epistemic Possibilities", *The Philosophical Review*, 100(4): 581-605.
DEROSE, K. 1992: "Contextualism and knowledge attributions", *Philosophy and Phenomenological Research*, 52(4): 913-929.
DODD, D. AND SWEENEY, P. 2010: "Indexicals and Utterance Production", *Philosophical Studies*, 150 (3): 331-348.
EGAN, A., HAWTHORNE, J., AND WEATHERSON, B. 2005: "Epistemic modals in context", in Gerhard Preyer and Georg Peter (eds.), *Contextualism in Philosophy: Knowledge, Meaning, and Truth*, 131-68. Oxford: Oxford University Press.
EGAN, A. 2009: "Billboards, bombs, and shotgun weddings", *Synthese*, 166: 251-79.
KAPLAN, D. 1989a: "Demonstratives". In Almog et al (ed.) *Themes from Kaplan*, 481–564.
KAPLAN, D. 1989b: "Afterthoughts". In Almog et al. (ed.) *Themes from Kaplan*, 565–614.
KOLBEL, M. 2002: *Truth Without Objectivity*. London: Routledge.
LEWIS, D. 1996: "Elusive knowledge", Australasian Journal of Philosophy, 74(4): 549-567.
MACFARLANE, J. 2003: "Future contingents and relative truth". *Philosophical Quarterly* 53: 321-36.
MACFARLANE, J. 2005: "The assessment sensitivity of knowledge attributions", *Oxford Studies in Epistemology* 1: 197-233.

MACFARLANE, J. 2009: "Nonindexical Contextualism", *Synthese* 166: 231-50.

PREDELLI, S. 1998: "I am not here now", *Analysis* 58 (2) 107.

PREDELLI, S. 2002: "Intentions, indexicals and communication", *Analysis* 64 (4) 310.

RECANATI, F. 2007: *Perspectival Thought: A Plea for (Moderate) Relativism*. Oxford: Oxford University Press.

RICHARD, M. 2008: *When Truth Gives Out*. Oxford: Oxford University Press.

SWEENEY, P. *forthcoming*: "Future Contingents, Indeterminacy and Context". *Pacific Philosophical Quarterly*.

WEATHERSON, B. 2009: "Conditionals and indexical relativism", *Synthese* 166: 333-57.