

# 6

## Perspective in Taste Predicates and Epistemic Modals

*Jonathan Schaffer*

Imagine that Ann, asked to name her favorite treat, answers:

1. Licorice is tasty

Imagine that Ben, having hidden some licorice in the cupboard, whispers to Ann:

2. There might be licorice in the cupboard

What if any role is played by *perspective*—whom the licorice is tasty to, whose evidence allows for licorice in the cupboard—in the semantics of such sentences?

I will argue that taste predicates like “tasty” and “fun” project syntactically real *experiencer arguments*, which specify the perspective at issue. Thus 1 basically means [licorice is tasty *to*—], with the blank filled in by the speech context. Relative to the context in which Ann is asked to name her favorite treat, the blank is most naturally filled in with “Ann.” But relative to a context in which Ann is asked to suggest a snack for both her and Ben, the blank is most naturally filled in as “both Ann and Ben.” The perspective may be specified explicitly, as in:

3. Licorice is tasty to me
4. Licorice is tasty to everyone

But when the perspective is not specified explicitly, as in 1, it is supplied by the context.

I will also argue that modals like “might” and “must” feature *restrictor arguments* in logical form, which specify the perspective at issue. Thus 2 basically means [there might, *given*—, be licorice in the cupboard], with the blank filled in by the speech context (cf. Kratzer 1977). Relative to the context in which Ben is whispering to

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Ann about her prospects for licorice, the blank is most naturally filled in with “what Ann knows.” But relative to a context in which Ben is professing his own ignorance as to where he hid the licorice, the blank is most naturally filled in with “what Ben knows.” The restrictor may be specified explicitly, as in:

5. There might, given what I know, be licorice in the cupboard
6. There might, given what any of us know, be licorice in the cupboard

But when the restrictor is not specified explicitly, as in 2, it is supplied by the context.

I will thus be defending the view—which I will label *meaning perspectivalism*—on which perspective plays a semantic role with respect to the proposition expressed by sentences with taste predicates or epistemic modals. Such propositions are *always perspective-specific*. And the version of meaning perspectivalism that I will defend is *contextualist*, insofar as it allows that sentences like 1 and 2 can express different propositions in different contexts, in ways traceable to the occurrence of the taste predicate and epistemic modal, and involving differences in the perspective at issue.

Meaning perspectivalism contrasts with *truth perspectivalism* (including *truth relativism*), on which perspective does not necessarily factor into the proposition expressed, but rather plays a role later in the semantic machinery, in truth evaluation. The truth perspectivalist holds that sentences like 1 and 2 may express perspective-neutral propositions. But she adds that a given proposition may be *true for Ann*, and yet *false for Ben*.

Meaning perspectivalism also contrasts with *absolutism*, on which perspective plays no semantic role whatsoever, either in the proposition expressed, or in its truth evaluation. The absolutist holds that sentences like 1 and 2 may express perspective-neutral propositions, and that such propositions are objectively true or false in a completely perspective-independent way.

Of course mixed views are possible. For instance, one might be a meaning perspectivalist for taste predicates, and an absolutist for epistemic modals. It is a substantive claim that perspective plays the same semantic role in both taste predicates and epistemic modals. Indeed it is already a substantive claim that perspective plays the same semantic role in different taste predicates like “tasty” and “fun.” Though in defending meaning perspectivalism for taste predicates and for epistemic modals, I shall in effect be defending a unified approach.

*Overview:* In § 1 I will provide an overview of the space of theories about the semantic role of perspective, by contrasting meaning perspectivalism, truth perspectivalism, and absolutism (and relating these to contextualism and relativism). In § 2 I will defend a contextualist form of meaning perspectivalism for taste predicates, by arguing that these project syntactically real experiencer arguments. In § 3 I will turn to epistemic modals, and defend a contextualist form of meaning perspectivalism by arguing that modals feature restrictor arguments in logical form. And finally in § 4

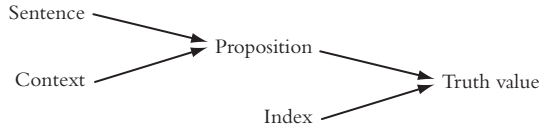


Fig. 6.1.

I will consider disagreement cases, which have been thought to trouble contextualist views, and even to require relativism. I will argue that the contextualist form of meaning perspectivalism I defend actually yields the best explanation of disagreement cases, once one moves beyond the one or two toy cases discussed in the literature, and considers the full range and dynamics of disagreements.

## 1. The Space of Theories

What if any role is played *by perspective* in the semantics of taste predicates and epistemic modals? It will help to situate this question within an orthodox Kaplanian semantical framework, on which a sentence type at a context expresses *a proposition*, and a proposition relative to an *index* takes a truth value (Kaplan 1989) (see Fig. 6.1).

This framework serves to usefully constrain where perspective might enter into the semantics. Consider a *bare sentence*—one which does not explicitly specify a perspective—such as:

1. Licorice is tasty
2. There might be licorice in the cupboard

Perspective can either enter the semantics of such bare sentences through the context and into the proposition expressed (as per meaning perspectivalism), or through the index and into truth evaluation (as per truth perspectivalism). There is no other entry point.

There are some useful analogies to be made between the space of theories concerning the semantic role of perspective, and the space of theories concerning the semantic role of *time*.<sup>1</sup> Consider a sentence that does not explicitly specify a time, such as:

7. It is raining

One might think that the time at issue can enter through the context and into the proposition expressed. This is *eternalism* (analogous to meaning perspectivalism), on which 7 basically means [it is raining *on*—], with the blank filled in by the speech context. Or one might think that the time at issue can enter through the index and into truth evaluation. This is *temporalism* (analogous to truth perspectivalism), on which 7 may express a time-neutral proposition, which might be *true on Monday*

<sup>1</sup> For more on the space of theories concerning the semantic role of time, see Richard (2003).

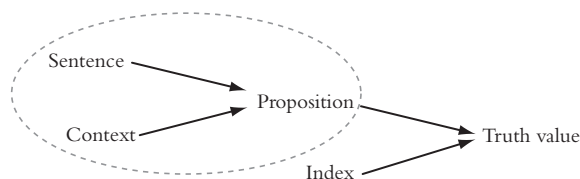


Fig. 6.2.

and yet *false on Tuesday*. And in principle one might also think—though this would be a deeply implausible view to hold for time—that 7 may express a time-neutral proposition, which is timelessly true or false. This is what the analogue of absolutism would be for time. (Absolutism is far more plausible in the case of perspective.)

In this section I will primarily focus on bare sentences like 1 and 2. In the assumed Kaplanian framework a full semantic treatment of such sentences must answer two questions. There is *the proposition question*, concerning what proposition the sentence in question expresses at a given context (§ 1.1). And there is *the index question*, concerning how the index is involved in evaluating propositions for truth (§ 1.2). There turn out to be important connections between the answers to these questions, which constrain the overall space of theories (§ 1.3). In particular, given the answer to the proposition question given by the meaning perspectivist, the answer to the index question given by the truth perspectivist will turn out to be unhelpful. If all the propositions of interest are perspective-specific, then adding a perspective coordinate into truth evaluation will do no work. I will conclude the discussion (§ 1.4) by connecting the theories under discussion to contextualism and relativism, which are related but strictly speaking orthogonal.

### 1.1. *The proposition question*

Imagine that Ann, asked to name her favorite treat, answers with 1. Imagine that Ben, having hidden some licorice in the cupboard, whispers 2 to Ann. What proposition is expressed by each these sentences in their respective contexts? In general, I am asking how the circled portion goes in Fig. 6.2 for bare taste sentences and bare modal sentences.

It is worth noting at the outset how this portion of the orthodox framework rules out certain views. (This is not to say that such views should be ruled out, but only to explain what assumptions would need to be waived to situate them.) First, there are views that deny that a sentence at a context always expresses a proposition. One example of such a view is *non-cognitivism*, according to which sentences like 1 and/or 2 are not in the business of expressing propositions at all.<sup>2</sup> A second example of this

<sup>2</sup> One prominent form of non-cognitivism for epistemic modals has them serving, not as elements of the proposition, but rather as extra-propositional *force markers* for a speech act weaker than assertion. Thus Hare claims: “We have a use for a way of volubly and loquaciously *not* making a certain statement; and perhaps

first sort of view is the *propositional radical* view, according to which sentences like 1 and/or 2 express gappy contents such as [licorice is tasty to—] and [there might, given—, be licorice in the cupboard], where the blanks are not filled in by the semantics.<sup>3</sup>

Second, there are views that deny that a sentence at a context always expresses just one proposition. These are *pluralist* views, on which sentences like 1 and/or 2 might express a plurality of propositions.<sup>4</sup> One pertinent example of a pluralist view is *content relativism*, on which sentences like 1 and/or 2 might express different propositions to different people. For instance, 1 might express [licorice is tasty to Ann] to Ann, and [licorice is tasty to Ben] to Ben.<sup>5</sup>

While I cannot possibly defend the orthodox framework on this point here, my defense of meaning perspectivalism will in effect yield the following partial defense: nothing in the semantic role of perspective requires deviating from orthodoxy in this respect. (Though I should confess that I would modify orthodoxy in two other respects: I think that there may be multiple speech contexts associated with a given sentence tokening (§ 1.4, § 4.2), and I don't think that an index is needed in the semantic machinery at all (§ 1.2). But these issues will prove largely independent of the current discussion. The meaning perspectivalist *can* be entirely orthodox.)

So, assuming that one and only one proposition is expressed by a sentence at a context, one might distinguish two main answers as to *which proposition is expressed*, for bare sentences like 1 and 2. The *perspective-neutralist* holds that, for a given bare sentence, there is a context relative to which it expresses a perspective-neutral proposition.<sup>6</sup> Note that her core claim is only about perspective-neutrality. She might hold that such sentences invariantly express *minimal propositions*, such as [licorice is tasty] and [there might be licorice in the cupboard]. But she might equally allow for further information in the proposition, as long as it does not concern perspective (and she might even allow for context sensitivity with respect to this further information). For instance, she might well allow that “tasty” takes a degree argument that is contextually supplied when left implicit: [licorice is tasty to *degree*—], as long as the degree argument is held to be unconnected to any perspective.<sup>7</sup>

there is one sense of ‘may’ in which it fulfills this function” (1967: 321). See § 3 for some arguments (from embeddings and from the univocity of modals) against this view.

<sup>3</sup> See Bach (1994) for further discussion of propositional radicals.

<sup>4</sup> See Soames (2005) for a defense of pluralism, based on the idea that the proposition expressed is only required to be “an acceptable completion” of a “propositional matrix.”

<sup>5</sup> See Stephenson (2007), Egan (2009), and Weatherson (2009) for defenses of various forms of content relativism, and Egan, Hawthorne, and Weatherson (2005) for objections.

<sup>6</sup> Perspective-neutral propositions of the minimal sort are in the spirit of the insensitive semantics of Cappelen and Lepore (2005). Perspective-neutrality is also presupposed in the relativist framework of Wright (2001), and in the truth relativist semantics of Lasnik (2005) and MacFarlane (2007).

<sup>7</sup> See Kennedy (2007) for a defense of degree arguments for gradable adjectives, and Glanzberg (2007) for a discussion of the idea that the scale associated with the degree argument might get constructed in ways that are connected to the perspective at issue.

Note also the quantification: the perspective-neutralist is only committed to the claim that there are perspective-neutral propositions expressed at *some* contexts. She can allow that there are other contexts relative to which bare sentences express perspective-specific propositions. She can thus be a full-blown contextualist, in allowing that sentences like 1 and 2 can express different propositions in different contexts, in ways traceable to the occurrence of the taste predicate and epistemic modal, and involving differences in the perspective at issue. (This is part of the reason why contextualism and relativism are compatible doctrines, and why contextualism is strictly orthogonal to the present debate: § 1.4.)

The alternative to perspective-neutralism is the *perspective-specific* view on which sentences like 1 and 2 express perspective-specific propositions at every context. (This is the view of the meaning perspectivalist: § 1.3.) The friend of perspective-specific propositions may or may not also posit further information. For instance, she might also posit a degree argument for “tasty”, and so hold that 1 basically means [licorice is tasty *to degree* —to —], with the degree and experiencer blanks filled in by the speech context.

The perspective-specific theorist will presumably trace the perspectival information, in a compositional way, to the occurrence of the taste predicate and the epistemic modal. There are at least two subtly different ways in which this might work. First, she might treat the terms in question (“tasty”, “fun”, “might”, “must”, etc.) as themselves *indexicals* (analogous to “I”, “here”, and “now”), whose reference is not determined by linguistic meaning alone, but for which context plays a reference determining role.<sup>8</sup> Second, she might treat the terms in question as *relational*, where the terms in question are themselves invariant in reference, but bring with them further arguments which context may evaluate. And a relationalist treatment further subdivides between *syntactic relationalism*, where the further argument is syntactically realized, and *semantic relationalism*, where the further argument is not syntactically realized but is still present in an “enriched” logical form.

While my own sympathies are with syntactic relationalism for taste predicates, and are divided between syntactic and semantic relationalism for epistemic modals, these distinctions will not matter for what follows. I am only concerned with defending the perspective-specific view generally. (I will use relationalist formulations for definiteness, but nothing should turn on this.) That said, it is important to distinguish these views, as they posit different logical forms. Thus a fuller taxonomy of answers to the proposition question (amongst those that preserve the orthodox idea of one and only one proposition per context) would be as shown in Fig. 6.3.

<sup>8</sup> In this vein, DeRose (1991) defends the related view that “possible” in the epistemic sense functions as a context-sensitive term. Rothschild and Segal (2009) provide an indexicalist semantics for “red” and a class of related predicates, which could naturally be extended to taste predicates.

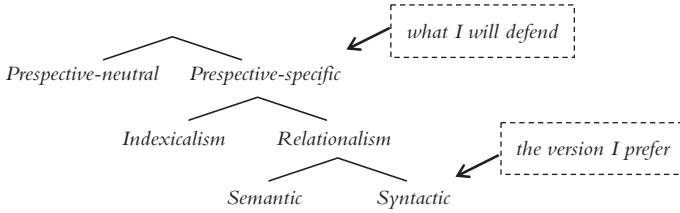


Fig. 6.3.

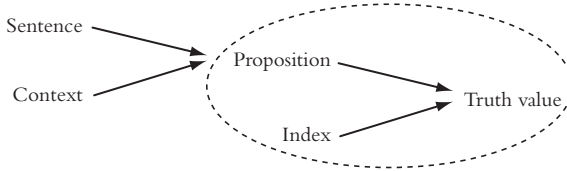


Fig. 6.4.

1.2. *The index question*

Suppose that one has answered the proposition question. One has determined whether bare taste claims and bare epistemic modal claims sometimes express perspective-neutral propositions, or always express perspective-specific propositions. It remains to ask how these (and other) propositions are to be evaluated for truth. I am now asking how the circled portion in Fig. 6.4 works.

An index is some  $n$ -tuple of coordinates. In Kaplan’s (1989) formal fragment, propositions are evaluated for truth relative to world and time coordinates  $\langle w, t \rangle$ . Moreover, the positions of these coordinates are initialized by the speech context. Operators may shift the positions of these coordinates (e.g. a modal operator may shift the position of the world coordinate). But an operator-free proposition expressed at  $\langle w_i, t_j \rangle$  will be evaluated for truth relative to  $\langle w_i, t_j \rangle$ .<sup>9</sup>

There are thus two subquestions of the index question that will prove useful to separate. First, there is *the number subquestion*, concerning which coordinates are listed in the index. Second, there is *the setting subquestion*, concerning how the positions of these coordinates are initialized.

As to the number subquestion, there are two main views to distinguish. The *baseline* view does not posit any coordinates that provide a perspective. What (if any) coordinates it does posit will not matter here, so Table 6.1 shows four versions of the baseline view that I will not further distinguish.

For definiteness I will follow orthodoxy and invoke the Kaplanian  $\langle w, t \rangle$  two-tuple version of the baseline view.<sup>10</sup>

<sup>9</sup> Kaplan himself was willing to add further coordinates to the index (1989: 504). He uses  $\langle w, t \rangle$  pairs solely because his formal fragment was equipped with only modal and temporal operators.

<sup>10</sup> I myself am a schmentencite but cannot possibly defend this view here. The interested reader might consult King (2003) for doing without all but worlds, and then consider the systems of von Stechow (2002)

Table 6.1

|               |   |
|---------------|---|
| Lewis (1980)  | the index is a world, time, location, and precision four-tuple $\langle w, t, l, p \rangle$ |
| Kaplan (1989) | the index is a world, time two-tuple $\langle w, t \rangle$                                 |
| King (2003)   | the index is just a world one-tuple $\langle w \rangle$                                     |
| schmentencite | the index is a zero-tuple (propositions are true or false <i>simpliciter</i> )              |

The alternative to the baseline view is *the supplemented view* which adds a *judge coordinate* to provide a perspective.<sup>11</sup> (This is the view of the truth perspectivalist: § 1.3.) Given a Kaplanian  $\langle w, t \rangle$  baseline, the supplementer holds that the index is a  $\langle w, t, j \rangle$  triple. A proposition true at  $\langle w_m, t_n, j_{Ann} \rangle$  but false at  $\langle w_m, t_n, j_{Ben} \rangle$  may be said to be *true for Ann* but *false for Ben* (relative to  $\langle w_m, t_n \rangle$ ).

Turning to the setting subquestion as to how the positions of these coordinates are initialized, everyone in the debate agrees that the settings of the baseline coordinates are initialized from the speech context. But what about the alleged judge coordinate of the supplemented view? If the judge coordinate is treated on the precedent of the world and time coordinates it too will be initialized from the speech context. Call this *the speaker view*. On the speaker view, absent any judge-shifting operators, propositions are evaluated for truth relative to the perspective of the speaker.<sup>12</sup> (This is the view of the *non-indexical contextualist*: § 1.3.)

But *truth relativists* (MacFarlane 2003 and 2005a; Lasersohn 2005; Egan, Hawthorne, and Weatherson 2005, *inter alia*) want propositions to be evaluated for truth not from the perspective of the speaker but from the perspective of the *assessor*. What is radical about truth relativism is not so much the added judge coordinate, but rather the idea that the default setting of this coordinate is to the assessor. Call this *the assessor view*. While the supplemented view challenges the baseline answer to the number subquestion, the assessor view further challenges the generality of the “default to the speech context” rule with respect to the setting subquestion.<sup>13</sup> Thus a fuller taxonomy of answers to the index question would be as shown in Fig. 6.5.

and Schlenker (2005a) and arguments of Percus (2000) and Speas (2004b) according to which verbs syntactically project not just a time but also a world argument. See Schaffer (forthcoming and MS) for further discussion, and Cappelen and Hawthorne (2009) for a different version of the view that propositions are true or false *simpliciter*, which does not invoke world arguments.

<sup>11</sup> The term ‘judge’ is from Lasersohn (2005: 663). MacFarlane (2007) invokes *standards of judgement*, and Egan (2007) speaks of *individuals* (who presumably serve as the judges). Nothing in what follows will turn on this distinction. In the main text I will follow Lasersohn’s terminology for the sake of definiteness.

<sup>12</sup> Strictly speaking all the speaker-view is committed to is that the position of the judge coordinate is initialized from the speech context. This could work by taking in the speaker’s intentions to speak of a given perspective (not necessarily her own), rather than automatically taking in the speaker’s own perspective.

<sup>13</sup> MacFarlane (this volume: § 5.1) describes the truth relativist position in terms of *bi-contextuality*, with the idea that the default setting of  $\langle w_{utter}, t_{utter}, j_{assess} \rangle$  is arrived at by piecing together bits of two proper contexts  $\langle w_{utter}, t_{utter}, j_{utter} \rangle$  and  $\langle w_{assess}, t_{assess}, j_{assess} \rangle$ . This is how he generates the  $\langle w_{utter}, t_{utter}, j_{assess} \rangle$  default. (The other positions of the two proper contexts— $\langle \dots, j_{utter} \rangle$  and  $\langle w_{assess}, t_{assess}, \dots \rangle$ —do no further work.)

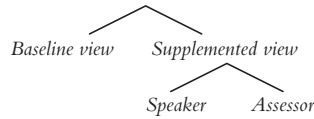


Fig. 6.5.

### 1.3. The space of theories

Answers to the proposition and index questions are not independent. The primary connection of interest is that the perspective-specific view of propositions renders the supplemented view of the index unusable. Consider a given perspective-specific proposition, such as [licorice is tasty to Ann]. All the perspectival information is already provided. Whether or not such a proposition is true should be constant across any alleged perspectives of evaluation. No matter how Ben or Claire or anyone else views licorice, whether [licorice is tasty for Ann] is “true for Ann”, “true for Ben”, or “true for Claire” (etc.) should depend only on how Ann views licorice.

The analogy with the semantics of time may be useful. Consider a given time-specific proposition, such as [it is raining on Monday]. Whether or not such a proposition is true should be constant across any times of evaluation. No matter what the weather is like on Tuesday or any other time, whether [it is raining on Monday] is true on Tuesday or Wednesday or five hundred years from now (etc.) should depend only on what the weather is like on Monday.<sup>14</sup>

More precisely, if the friend of the supplemented view thinks that Ann has expressed the proposition [licorice is tasty to Ann], and treats [to Ann] as an intensional operator serving to fix the position of the judge coordinate on Ann (Lasersohn 2005: 666, 668), then she will find her judge coordinate fixed on Ann *at every point of assessment* (Lasersohn 2009: 362). So it will make no difference whatsoever as to which perspective such a proposition is evaluated from for truth. The posit of a judge coordinate will thus be unusable, in that it will do no semantic work whatsoever.

Thus one reaches the space of theories shown in Table 6.2 (with the ‘X’-ed box eliminated because the supplemented view of the index requires perspective-neutral propositions to do any work).

Moreover, truth perspectivalism divides between the speaker and assessor answers to the setting subquestion of the index question. The speaker answer yields the theory

<sup>14</sup> In this respect my argument for meaning perspectivalism mirrors one of the standard arguments for eternalism, which invokes the semantic treatment of tense to argue that all propositions are time-specific (cf. Partee 1973). As King concludes: “[I]f the proper way to treat tenses is *not* as index shifting sentence operators, then there is no need for temporal coordinates in indices of evaluation” (2003: 223).

Table 6.2

|                                   | <i>Perspective-specific propositions</i> | <i>Perspective-neutral propositions</i> |
|-----------------------------------|--|---|
| <i>Baseline view of the index</i> | Meaning perspectivalism                  | Absolutism                              |
| <i>Supplemented view</i>          | X  | Truth perspectivalism                   |

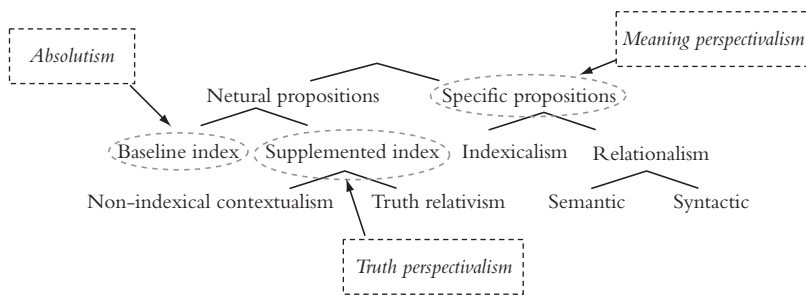


Fig. 6.6.

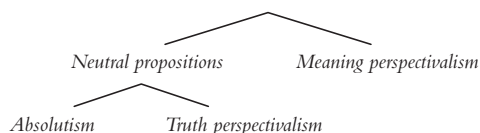


Fig. 6.7.

sometimes labeled *non-indexical contextualism*, with a given perspective-neutral proposition being evaluated for truth relative to a supplemented index (e.g.  $\langle w, t, j \rangle$ ), with  $j$  defaulting to the speaker.<sup>15</sup> The assessor answer yields *truth relativism*.<sup>16</sup>

Thus one reaches the overall theory tree shown in Fig. 6.6. Lopping off the branches I am lumping together, and re-labeling as per the boxes yields Fig. 6.7.

Recall that this is only the space of theories arising on the assumption that each sentence expresses one and only one proposition per context (§ 1.1). To make room for non-cognitivism, content relativism, and other approaches that reject this bit of orthodoxy, one would need a lot more tree.<sup>17</sup>

<sup>15</sup> Non-indexical contextualism is introduced (though not defended) by MacFarlane (2009). Brogaard (2008) defends a version of this view for moral claims.

<sup>16</sup> See Lasersohn (2005) and MacFarlane (2007) for developed versions of truth relativism.

<sup>17</sup> Note that meaning perspectivalism and truth perspectivalism are only characterized under the assumption that a sentence at a context expresses one and only one proposition. If this bit of orthodoxy is rejected, there is room for a view that holds *both* (i) that every proposition at issue is perspective-specific, but that (ii)

#### 1.4. Contextualism and relativism?

The reader expecting discussion of the debate between contextualists and relativists may wonder at the idiosyncratic way I have mapped out the space of theories. (Though I hope that the reader familiar with the debate over the semantic role of time will see the parallel.) There are three main reasons why I have *not* tried to set up any division between contextualists and relativists. The first and most important reason is that there is no division between contextualism and relativism. The theories are compatible. The relativist can allow that bare taste sentences and bare epistemic modal sentences (like 1 and 2) express different propositions in different contexts, in ways traceable to the occurrence of the taste predicate and epistemic modal, and involving differences in the perspective at issue (§ 1.1). She need only add that such bare sentences can also express perspective-neutral propositions in some contexts (and that propositions are evaluated for truth via a judge-supplemented index, with the judge defaulting to the assessor). She would thereby be a relativistic contextualist. Of course most contextualists are also anti-relativists, and most relativists are also anti-contextualists, but such an opposition is not required by relativism or by contextualism *per se*.

The second reason I have not tried to set up any division between contextualists and relativists is that I fear that “contextualism” may be losing its usefulness as a label for doing semantics. The label “non-indexical contextualism” has become attached to what I am calling the speaker version of truth perspectivalism, but this theory is not contextualist in any standard sense. At least as I use “contextualism” (drawn from the literature on the semantics of “know”), it is basically a claim that a single sentence can express different propositions in different contexts. More precisely, contextualism for taste predicates (/epistemic modals) is the view that a single taste (/epistemic modal) sentence can express different propositions in different contexts, in ways traceable to the occurrence of the taste predicate (/epistemic modal), and involving differences in the perspective at issue. The view labeled “non-indexical contextualism” makes no such claim. I see how this view shares certain underlying motivations with contextualism (for instance in being speaker-centric rather than assessor-centric), but the views work quite differently from the perspective of the semantic machinery. So I think it would be misleading to speak of contextualism and the view labeled “non-indexical contextualism” as species of a common semantic genus.

Third, I also doubt that “relativism” is a useful label for doing semantics. I am more than happy to speak of “truth relativism” and “content relativism”, and consider each view on its own merits. But, while these views may share certain underlying motivations (being assessor-centric), they too work quite differently from the perspective of the semantic machinery. So I think that it would be misleading to treat them as species of a common semantic genus.

propositions are evaluated for truth via a judge-supplemented index. Indeed content relativism—at least in the form developed in Stephenson (2007)—upholds both views.

Indeed my own view of the semantics—while certainly contextualist—is consistent with content relativism. In this vein, Stephenson (2007)—who is a content relativist for taste predicates (though not for epistemic modals)—agrees that there is perspectival information specified in the proposition. She just adds a new way for such information to be specified, by positing a new phonologically null element  $PRO_{judge}$ , whose denotation is read off an assessor sensitive judge coordinate. Stephenson allows  $PRO_{judge}$  as one possible contextually supplied value for the syntactically realized experiencer argument of taste predicates, and one may extend her view by allowing [what  $PRO_{judge}$  knows] as one possible contextually supplied value for the restrictor argument for epistemic modals. For present purposes I have no dispute with such a view. That said, to the extent that content relativism is motivated by disagreement cases, I will in effect be arguing that one can already handle disagreement cases well enough without any of the added machinery of content relativism, and so without a need to posit anything like  $PRO_{judge}$ . specify the constraints on its distribution, add a judge coordinate and the assessor defaulting needed to interpret it, or allow for the open-ended plurality of propositions per single sentence-context pair that results (§ 4.3).<sup>18</sup>

Moreover, while I myself am opposed to both truth relativism and content relativism, there is a form of relativism that I would not necessarily oppose: *context relativism*. According to context relativism, a given sentence tokening may be assigned a different speech context by different assessors. For instance, if the preacher stands before Ann, Ben, Claire, and Dave, and says “Jesus loves you” (with singular “you”), context relativism has it that Ann should interpret this sentence relative to a speech context in which she is the one and only addressee, Ben should likewise interpret this sentence relative to a speech context in which he is the one and only addressee, etc.<sup>19</sup> Though note that this form of relativism does not require any judge coordinate in the index, or any sense in which a given proposition may be true for Ann but false for Ben, or any deviation from the thesis that a sentence-context pair generates a unique proposition. This is just to point out yet another way in which the label “relativism” may pick out theories that look extremely different at the level of the semantic machinery.

That said, there is at least the following point of connection between my taxonomy and ‘contextualism versus relativism.’ The meaning perspectivist will almost certainly be a contextualist. After all, given that she holds that perspective enters the semantics of bare sentences through the context, she will almost certainly

<sup>18</sup> A different version of content relativism, discussed in Egan (2009), also agrees that there is perspectival information specified in the proposition. It just allows that sometimes what might be expressed is an incomplete propositional radical, which different assessors will fill in different ways. And see Weatherson (2009) for a subtly different third form of content relativism. It is a nice question for all these forms of content relativism as to what constrains the distribution of their silent assessor-sensitive element.

<sup>19</sup> See Egan (2009) for further discussion of these matters.

allow for contextual sensitivity. Strictly speaking she need not. She could in principle hold that every single context supplies the very same perspective (perhaps God's?). But I take it that any plausible form of meaning perspectivalism will be contextualist, and the form of meaning perspectivalism I defend is paradigmatically contextualist.

## 2. Meaning Perspectivalism for Taste Predicates

Imagine that Ann, asked to name her favorite treat, answers:

1. Licorice is tasty

Imagine that Claire, asked to name her favorite amusement park ride, answers:

8. Roller coasters are fun

I will now argue that these two taste predicates (“tasty” and “fun” respectively) project syntactically real *experiencer arguments*, which specify the perspective at issue. Given that such arguments are assigned specific values by the semantics at every context, meaning perspectivalism follows. Relative to any context, the proposition expressed by 1 and the proposition expressed by 8 will involve a specified experiencer.

Four qualifications should be made from the start. First, I should confess that I do not know exactly what defines a taste predicate. I will follow Lasersohn (2005: 645) in assuming that “tasty” and “fun” are kindred in this respect, and remaining neutral on what (if any) other predicates are of this kind. If there is to be a natural lexical kind of which “tasty” and “fun” are paradigmatic members, it might be *adjectives derived from experiencer verbs*.<sup>20</sup> Thus “tasty” comes from the verb “to taste”, which comes from the Latin “*taxtare*”, meaning *to evaluate*. “Fun” comes from the Middle English “*to fon*”, meaning *to befool*. (Here is already some *prima facie* reason to suspect experiencer arguments. Given that experiencer verbs project experiencer arguments, and that the verbal structure survives within its adjectival derivative, one should expect experiencer arguments within the adjectival derivatives. At any rate I will argue that this is what one finds with “tasty” and “fun.” The experiencer argument is still alive and kicking, even when left implicit.)

Second, I take no stance on how to evaluate covert experiencer arguments, save to piously intone that these are evaluated by context. Presumably the contextual evaluation of covert arguments is something we are stuck with in any case, so at least no new mysteries are created. There may well be stereotypical conventions associated with certain covert positions.<sup>21</sup> Indeed, I suspect that covert experiencer

<sup>20</sup> Thanks to Peter Ludlow for suggesting this point.

<sup>21</sup> *Point of clarification*: not all covert arguments need behave in the same way. For instance, the covert subjects of passives and the covert object of “Pam ate” are both existentially closed, while the covert object of “Pain noticed” is deictic. The covert experiencer of “John is an enemy” and of “licorice is tasty” can both come as either free variables or as closed under various quantifiers. One diagnostic for possible settings is negation. Thus “the ship was not sunk” seems to only allow the interpretation that the ship was not sunk *by anyone*. This suggests that the subject of the passive must be existentially closed (below where the negation

arguments are stereotypically set to either (i) the speaker, via a covert *de se* pronoun (PRO), or (ii) the typical person, via a covert *generic* pronoun (PRO<sub>ARB</sub>). Though sufficient contextual cues can override the stereotypical settings. In particular, embedding under attitude verbs *tends* to shift the experiencer to the subject of the lowest attitude. Thus in both “Ann thinks that licorice is tasty” and “Ben thinks that Ann thinks that licorice is tasty”, the most natural reading has the experiencer being Ann.

Third, when I render these experiencer arguments overtly, I will use “to”-phrases with “tasty” (e.g. “tasty to Ann”) and “for”-phrases with “fun” (e.g. “fun for Ben”). Some readers may prefer other renderings. I think there is a fair amount of idiolectal variation among English speakers on this score. In any case, I take both “to” and “for” to function purely as case assigners (e.g. “to Ann” is the way English renders “Ann” in the dative case), which get deleted in semantic evaluation. Basically “to” and “for” are just different stylistic variants for slipping past the case filter.

Fourth, I will be using four diagnostics to test for covert experiencer arguments in bare taste claims like 1 and 8. These are: the existence of bound readings where the argument in question is bound to a quantifier (§ 2.1), the licensing of overt counterparts where the experiencer argument goes explicit (§ 2.2), the possibility of using the experiencer argument to control the subject of infinitival clauses (§ 2.3), and the existence of sluicing constructions targeting the experiencer argument (§ 2.4). It should be acknowledged from the start that all of these diagnostics are defeasible, embody controversial theoretical assumptions, and require judgments that may be contested. Such is unavoidable in empirical inquiry. The *best-case result* is when all the diagnostics converge. I will be claiming just such a best-case result for taste claims.

### 2.1. *The binding test*

One leading diagnostic for covert arguments is the possibility of binding them (Partee 1989; Stanley 2000). To see the binding test in action, start with pronouns. Thus consider:

9. Every boy called his mother

9 has a natural reading—the bound reading—on which it basically says that boy<sub>1</sub>, called boy<sub>1</sub>’s mother, boy<sub>2</sub> called boy<sub>2</sub>’s mother, etc. The denotation of “his” is bound to the quantifier. On this reading there needn’t be a single mother who received all the calls. Each mother only needs to have received as many calls as she has boys. (The bound reading is not the only possible reading of 9. There is also for instance the deictic reading on which there is a single mother who received all the calls—imagine the speaker pointing to a particular boy while saying “his.” What is relevant is only that the bound reading is a possible reading of the sentence.)

can reach). But “licorice is not tasty” seems to allow multiple interpretations, including: licorice is not tasty *to me*, licorice is not tasty *to the typical person*, licorice is not tasty *to anyone*, etc. This suggests that the experiencer can come free or closed under generic and universal quantifiers, etc. I am indebted to Kyle Johnson for discussion here.

Now consider “local.” According to Partee (1989), “local” projects a potentially covert argument [local *to* —]. One major source of evidence for such an argument is the prospect of a bound interpretation for sentences such as:

10. Every girl went to a local playground

10 has an interpretation on which it means that  $girl_1$ , went to a playground local to  $girl_1$ ,  $girl_2$  went to a playground local to  $girl_2$ , etc. On this reading there needn't be a single locale featuring all of these playgrounds.  $girl_1$ , could have been in Canberra and  $girl_2$  could have been in Reykjavik, as long as  $girl_1$  went to a Canberra playground and  $girl_2$  went to a Reykjavik playground. The evidence for “local” providing location-specific information via a covert argument is that it provides the best explanation for the existence of the bound reading of 10.

To see that something special is happening with “local” that allows for a bound reading, it might help to contrast 10 with:

11. Every man is mortal

11 does not have any natural bound reading, or at least any that I can hear. That is, there is no natural reading of 11 on which the mortality in question shifts as one cycles through the quantifier domain. This is presumably because “mortal” does not project any covert arguments, or at least none of the relevant sort to be bound by the quantifier phrase.

The standard view of binding is that it is syntactic relation, requiring the right syntactic environment (basically, co-indexing and c-command: Chomsky 1981). On this view the possibility of bound readings is excellent evidence for the syntactic reality of the argument in question. And likewise the impossibility of binding—assuming that the proper syntactic environment can be constructed—is excellent evidence for syntactic irrealty. But alternative semantic views of binding have also been proposed (cf. Schlenker 2005b). For present purposes I will remain neutral as between syntactic and semantic views of binding. I only assume that bound readings require the existence of arguments in logical form, whether or not these arguments are syntactically projected. In particular I assume that bound readings reveal the *pre-existence* of the argument in the question in the material under the quantifier, as opposed to the spontaneous creation of new material. In a slogan, I assume that the quantifier reveals structure rather than creating it.<sup>22</sup>

Thus one way to test whether taste predicates project experiencer arguments—as the meaning perspectivist maintains—is to see if there are taste claims with a bound experiencer reading. I think the result is a fairly clear *yes*. Start with “tasty.” To set the scene, imagine that the Smiths go out for ice cream. Ma only likes chocolate, Pa only likes vanilla, Suzy only likes rum raisin, and Billy only likes mint chip. Today they are in luck. Each finds their favorite flavor. So Ma, by way of celebrating their good fortune, says:

<sup>22</sup> Though see Recanati (2004) for the claim that the higher quantifier can bring into logical form the very arguments it then binds.

## 12. Everyone got something tasty

12 has a natural bound reading relative to Ma's speech context, which basically says that Ma got something tasty to Ma, Pa got something tasty to Pa, etc. There needn't be a single thing which is tasty to all of them (indeed, the story builds in that there is no single thing tasty to all of them).

To see that something special is happening with "tasty" that allows for a bound reading, it might help to contrast 12 with:

## 13. Everyone got something frozen

Imagine Ma expressing her pleasure that no one got any melted ice cream soup. 13 may well be true relative to such a context. But 13 (like 11) does not have a natural bound reading, at least to my ears. That is, there is no natural reading of 13 on which the frozenness varies across family members, because there is no sense in the notion of "frozen to Ma" or "frozen to Pa."<sup>23</sup> For other examples without a bound reading, consider:

## 14. Everyone got something round

## 15. Everyone got something artificially sweetened

Hence I conclude that "tasty" bears a potentially covert experiencer argument. This is the best explanation for the bound reading of 12, and the contrast between 12 and 13–15 as to the availability of a bound reading.

With "fun", imagine that the Smiths go to the amusement park. Ma only likes Ferns wheels, Pa only likes roller coasters, Suzy only likes bumper cars, and Billy only likes merry-go-rounds. Fortunately this amusement park has it all. So they split up and happily do their own thing. On the drive home, Pa, remarking on what a great outing they had, says:

## 16. Everyone did something fun

16 has a natural bound reading relative to Pa's speech context, which basically says that Ma did something fun for Ma, Pa did something fun for Pa, etc. There needn't be a single thing which is fun for all of them (indeed, the story builds in that there is no single thing fun for all of them).

For a contrast without a bound reading, consider:

## 17. Everyone did something legal

17 may well be true relative to Pa's speech context. Thus imagine Pa expressing his relief that Suzy and Billy refrained from their usual delinquencies. But 17 does not support any natural sort of bound reading. Further contrasts could be obtained with examples such as:

<sup>23</sup> *Caveat:* given the presence of a degree argument, there may be a somewhat unnatural but still possible bound reading which targets the degree argument. But there should at least be a clear contrast between 12 and 13, as to whether or not there is a natural bound reading available.

18. Everyone did something sedentary  
 19. Everyone did something environmental

Hence I conclude that “fun” bears a potentially covert experiencer argument. This is the best explanation for the bound reading of 16, and the contrast between 16 and 17–19 as to the availability of a bound reading. Overall it seems that both “tasty” and “fun” pattern with “local” and with pronouns in allowing bound readings.

There are several potential confounds to consider. But I will just address what might be the most obvious potential confound, which is that the bound argument might be a situation argument rather than an experiencer argument. For instance, one might maintain that the bound reading on 12 is basically: Ma was in a Ma-containing situation of getting something tasty, Pa was in a Pa-containing situation of getting something tasty, etc.

I believe in situation arguments and believe that they can be bound. I just do not believe that this can be what explains the relevant bound readings of 12 and 16, for two main reasons. First, such an alternative could not possibly explain the contrasts between 12 and 13–15, or between 16 and 17–19, as presumably every single one of these cases involves a situation argument. Taste predicates seem to be adding something special, and this needs to be explained. Second, one can append higher adverbial quantifiers binding the situation argument, as per:

20. Usually everyone gets something tasty

Thus imagine 20 uttered by Billy in answer to Ma’s utterance of 12, to indicate that this sort of outcome does not call for celebration. One natural way of reading 20, relative to Billy’s speech context, requires us to look across situations and see whether or not most of these situations involve everyone getting something tasty. This requires assessing the bound reading of “everyone got something tasty” *at a single situation*.

## 2.2. *The licensing test*

A second diagnostic for covert arguments is the possibility of making them explicit. To see the licensing test in action, consider passives such as:

21. The ship was sunk

21 is sometimes thought to feature a covert agent argument, and one way to argue for this is to argue that there are overt counterparts of 21 in which the agent is made explicit:

22. The ship was sunk by the pirates

To see that something special is happening with passives that license agent-specifying “by”-clauses, it might help to contrast 21 with an unaccusative construction:

23. The ship sank

The unaccusative construction does not license an agent-specifying “by”-clause:

24. \*The ship sank by the pirates<sup>24</sup>

Arguably, the best explanation for the contrast between the presence of overt agent-specifying counterparts of 21, and the absence of such counterparts for 23, is that 21 involves a covert agent argument but 23 does not.<sup>25</sup>

Thus one way to test for whether taste predicates project experiencer arguments—as the meaning perspectivalist maintains—is to see if there are taste claims with overt experiencer arguments. This is only a one-way test, in that the presence of overt counterparts would indicate the presence of an experiencer argument, but the absence of an overt counterpart would not necessarily indicate the absence of an experiencer argument. The experiencer argument might be required to remain unarticulated, like the subject argument of infinitival clauses (PRO). Indeed one plausible view of the “by”-clause in 22 is not as saturating the subject argument, but rather as an adjunct phrase that is required to be co-referential with the (still covert) agent argument. Though note that such a view still posits a syntactically realized covert agent argument for passives.

It might *seem* evident that there are overt counterparts for bare taste claims. Thus recall:

3. Licorice is tasty to me
4. Licorice is tasty to everyone

And likewise:

25. Roller coasters are fun for me
26. Roller coasters are fun for the whole family

But what is not yet obvious is that these experiencer phrases provide experiencer *arguments*. Thus the absolutist may well regard the experiencer phrases as merely optional adjuncts, and the truth perspectivalist may well regard the experiencer phrases, not as arguments of “tasty” or “fun”, but rather as intensional operators that shift the position of the judge coordinate (Lasersohn 2005: 666, 668). So to use the test from overt counterparts properly, we will need to consider the best interpretation of the experiencer phrases.

The experiencer phrases do not seem to be adjuncts, as the absolutist maintains. It should be acknowledged that there are no uncontroversial tests for arguments versus adjuncts, and that the distinction itself faces some difficult cases.<sup>26</sup> But at least one decent test concerns whether another adjunct phrase can be interposed in the middle. This is not permitted with an argument, but is with an adjunct. (To apply the test one

<sup>24</sup> There is a grammatical reading of 24 which should be disregarded, in which the “by”-clause is interpreted, not as specifying who sank the ship, but rather in specifying the location of the sinking (e.g. “the ship sank nearby by the pirates”).

<sup>25</sup> For some further discussion see Bhatt and Pancheva (2006: especially 556–9).

<sup>26</sup> Among the difficult cases for the argument versus adjunct distinction are benefactors. Thus compare: “Billy built a slingshot”, “Billy built Suzy a slingshot”, and “Billy built a slingshot for Suzy.” The status of the benefactor (Suzy) in these constructions is at best unclear. See Ludlow (2008: especially § 1) for a skeptical take on the distinction.

already needs to have judged that the interposed phrase is an adjunct. So this is circular as a general test for arguments versus adjuncts, but it can be used on a case-by-case basis given a background agreement on the status of the interposed phrase.) For an especially clear illustration of this test, consider “student.” This is a relational noun. It takes an argument, as given in “of history” or “of medicine.” The phrase “with a nose ring” is an adjunct. Or so befits the following pattern:

- 27. The student of history with the nose ring failed
- 28. \*The student with the nose ring of history failed

The best explanation for the badness of 28 is that it involves an attempt to interpose the adjunct phrase “with the nose ring” between “student” and its argument “of history.”<sup>27</sup>

To apply this form of argument to experiencer phrases, I will assume that “when sober” serves as an adjunct phrase for “tasty” and for “fun” (similar results can be obtained with “when dancing” and “at home”). Now consider:

- 29. Licorice is tasty to me when sober
- 30. \*Licorice is tasty when sober to me
- 31. Roller coasters are fun for me when sober
- 32. \*Roller coasters are fun when sober for me

It should be acknowledged that the contrast between 29 and 30, as well as between 31 and 32, is not quite as clear (to my ears at least) as the contrast between 27 and 28. But what is relevant is that there is still a perceptible contrast. So I think there is some good evidence that the experiencer phrases are not merely adjuncts, on grounds that interposition of an adjunct is at least somewhat bad.

Moreover, these phrases do not seem to be intensional operators, as the truth perspectivalist maintains. First, intensional operators should not be restricted as to which sentences they can operate on. So we should find that 3 is equally as acceptable as:

- 33. \*Licorice contains anise to me
- 34. \*Roller coasters are at amusement parks for me<sup>28</sup>

The contrast between 3 and 33, and between 8 and 34, are akin to the contrasts seen between the passive and unaccusative constructions in 22 and 24, with respect to the licensing of agent-specifying “by”-phrases. In both cases a special story seems required about the argument structure of the constructions in question (viz., passives involve agent arguments, taste predicates involve experiencer arguments). A general story about intensional operators seems to miss the crucial contrasts. The friend of the intensional operator story can of course claim that the experiencer phrases in 33 and 34 are *vacuous* intensional operators, given that the sentences embedded happen

<sup>27</sup> This test, in the first instance, concerns syntactic adjacency rather than semantic role. But it is reasonable to assume that syntactic adjacency and semantic argument status are at least typically correlated.

<sup>28</sup> 34 has an unintended but acceptable (if bizarre) reading which should be disregarded here, on which it says that roller coasters are placed at amusement parks for my benefit.

to be true or false in a constant way across perspectives. But at most this should make 33 and 34 conversationally infelicitous. To the extent that one can have discerning intuitions about these matters, I would say that 33 and 34 are grammatically odd, or at any rate not merely conversationally infelicitous.

A second reason to reject an intensional operator construal of experiencer phrases is that intensional operators iterate in a characteristic way, while arguments do not iterate at all (once the argument place is saturated, no additional argument of the sort in question is licensed). Thus consider:

35. \*Licorice is tasty to Ann to Ben  
 36. \*Roller coasters are fun for Ann for Ben for Claire

If these experiencer phrases were intensional operators, then 33 should basically say that by Ben's light, licorice is tasty by Ann's light (that is, that Ben holds that Ann holds licorice to be tasty). And 34 should basically say that by Claire's light, according to Ben, roller coasters are fun by Ann's lights (that is, that Claire holds that Ben holds that Ann holds that roller coasters are fun). Nothing like these readings seems available.

### 2.3. *The control test*

A third diagnostic for covert arguments is the possibility of having them control the covert subject of infinitival clauses. This test packs in two widely accepted but heavy theoretical assumptions. The first assumption is that infinitival clauses involve a phonologically null but syntactically realized subject argument (PRO). The second assumption is that PRO is subject to relations of *control*, where the controllers must be syntactically realized, and must be arguments of the predicate that select the infinitival clause.<sup>29</sup>

To see the control test in action, consider pronouns and agents of passives, as per:

37. He tried to eat all the ice cream  
 38. The ship was sunk to collect the insurance

In 37, the pronoun is controlling the covert subject of "to eat all the ice cream." In 38 it seems as if the person who sank the ship is the one aiming to collect the insurance. This provides further evidence for a (syntactically realized) agent argument, as controlling the covert subject of "to collect the insurance." Indeed, just as in the passive of 22 and the unaccusative of 24, there is a robust contrast between the passive of 38 and the unaccusative variant:

39. \*The ship sank to collect the insurance<sup>30,31</sup>

<sup>29</sup> See Landau (2000) for further discussion of these matters.

<sup>30</sup> Again there is an unintended and bizarre reading to be disregarded. The reading in question is one in which the ship, as an intentional agent, submerged itself for the money.

<sup>31</sup> Another related contrast pertaining to the existence of covert agent argument for passives: "the ship was sunk deliberately" versus \*"the ship sank deliberately." I thank Rajesh Bhatt for discussion on these issues.

So one way to test whether taste predicates project experiencer arguments is to see if there are bare taste claims on which the experiencer controls PRO. I think the result is a very clear *yes*, at least for “fun.”<sup>32</sup> Thus consider:

40. It is fun to dance

The natural reading—indeed perhaps the only reading—of 40 involves exactly the sort of control sought, where the person doing the dancing is the person who experiences the fun (cf. Epstein 1984). Thus Bhatt and Pancheva describe the PRO found in 40 as “controlled by a non-overt benefactive/experiencer argument of fun” (2006: 574).

To see that “fun” is doing something special—namely projecting an experiencer argument—which is generating the control relation, contrast 40 with:

41. It is popular to dance

41 simply comments on the social regard of the practice of dancing. There is no control reading of 41, presumably because “popular” does not project any argument that could control PRO. Hence I conclude that the best explanation for the control reading of 40, and the contrast between 40 and 41, is that taste predicates project syntactically real experiencer arguments.

#### 2.4. *The sluicing test*

A fourth diagnostic for covert arguments—and the final one considered here—is the prospect for sluicing constructions targeting them. To see the sluicing test in action, consider agents of passives again, with respect to:

42. The ship was sunk, but by whom?

The standard sluicing analysis of constructions like 42 is that they involve elliptical reconstruction of the first conjunct (*the source*) into the second conjunct (*the target*). The “whom” portion of the target is understood via *wh*-fronting an element recovered in the elliptical reconstruction (with pied-piping of “by”). This requires that this element (the agent who sank the ship, for 42) be present in the source to be reconstructed at the target and then *wh*-fronted.<sup>33</sup>

For a second illustration, one argument that “Pain ate” contains a covert direct object (for the patient, what was eaten) is that one can get sluicing constructions targeting it, as in:

43. Pam ate, but what?

<sup>32</sup> Unfortunately it is not possible to run the control diagnostic on “tasty”, at least in the form considered here. This is because, while “fun” is licensed on both objects and actions (video games can be fun, and playing video games can be fun), “tasty” is only licensed for objects not for actions (cakes can be tasty, but baking cakes cannot). The control diagnostic I am using involves the frame “it is—to  $\Phi$ ” which concerns actions.

<sup>33</sup> For a sustained discussion of sluicing and ellipsis see Merchant (2001). Whether sluicing calls for syntactic realization or mere semantic involvement depends on whether one holds a purely syntactic copy theory of ellipsis (cf. Fiengo and May 1994), or thinks of ellipsis as semantic.

43 may be usefully contrasted with an attempt to sluice a direct object for an intransitive verb like “dined”:

44. \*Pam dined, but what?

With bare taste claims, there are sluicing constructions that target the experiencer. Thus imagine that Ron has ten housemates. Yesterday he saw a big hunk of really stinky cheese in the communal fridge, and worried it was rotten. Today he sees that most of the cheese has been eaten, and concludes that someone must have loved it. This leads him to say:

45. The stinky cheese is tasty, but to whom?<sup>34</sup>

The standard analysis of 45 (as in 42) would involve a second conjunct formed from (i) *wh*-fronting (with pied-piping of “to”), plus (ii) ellipsis on the sister constituent of the *wh*-phrase from the source. An experiencer variable is needed in the source, to be *wh*-fronted at the target.

To get a minimal pair, contrast 45 with a case in which the predicate obviously does not select for an experiencer:

46. \*The stinky cheese is French, but to whom?

46 should elicit middling-to-strong judgments of ungrammaticality. This is presumably because “blue” does not project the right sort of argument for the sort of *wh*-fronting found in the second conjunct. Further examples of contrasts could be obtained with:

47. \*The stinky cheese is circular, but to whom?

48. \*The stinky cheese is blue, but to whom?

For an example with “fun”, imagine that Sam has ten housemates. Yesterday he saw a big pile of paper clips on the floor, and wondered what on earth they were there for. Today he learns that the paper clips have been played with over and over, and concludes that someone must have enjoyed playing with them. This leads him to say:

49. The paper clips are fun, but for whom?<sup>35</sup>

Again an experiencer argument is needed in the source, to be *wh*-fronted in the target. 49 should be contrasted with constructions such as:

50. \*The paper clips are metallic, but for whom?

51. \*The paper clips are magnetic, but for whom?

52. \*The paper clips are shiny, but for whom?

<sup>34</sup> Since Ron does not actually taste the cheese, some may prefer an epistemic modal construction serving as an evidential marker of indirectness, viz.: “The stinky cheese must be tasty, but for whom?” Also some find sluicing constructions more natural when the sluice is embedded in an attitude verb, “The stinky cheese is tasty, but I can’t imagine for whom.” The same points should arise either way.

<sup>35</sup> Again some may prefer a marker of evidential indirectness: “The paper clips must be fun, but for whom?”

Now I must mention that the sluicing diagnostic is at risk of overgenerating. Notice that one can sluice out temporal, locative, and even causative ‘arguments’ for “Pam ate”:

- 53. Pam ate, but when?
- 54. Pam ate, but where?
- 55. Pam ate, but why?

Overall, sluicing constructions seem to diagnose the prospect of *either* arguments or optional adjuncts.<sup>36</sup> So the same confound recurs here from the licensing test (§ 2.2), in that the absolutist may well regard the sluicing constructions in 45 and 49 as merely targeting an optional adjunct. But, given the argument above that experiencer phrases are not adjuncts, this confound is already resolved.

*Putting this all together.* All four of the diagnostics I have invoked—binding, licensing, control, and sluicing—have converged on the claim that taste predicates project experiencer arguments. This is a best-case result. I thus would conclude that the evidence for meaning perspectivalism for taste claims is very strong. Anytime there is a taste predicate, there is an experiencer specified, even if only covertly.

### 3. Meaning Perspectivalism for Epistemic Modals

Imagine that Ben, having hidden some licorice in the cupboard, whispers to Ann:

- 2. There might be licorice in the cupboard.

Imagine that Claire, listening into the conversation, leaps to the conclusion:

- 56. There must be licorice in the cupboard.

I will now argue that these two modals (“might” and “must”) feature *restrictor arguments*, which—as long as they are read as epistemic modals—specify the perspective at issue. Given that such arguments are assigned specific values by the semantics at every context, meaning perspectivalism follows. Relative to any context—so long as the modals are read as epistemic modals—the proposition expressed by 2 and the proposition expressed by 56 will involve a specified body of evidence. In this regard I am upholding the view of Kratzer (1977), according to which:

[W]hat we have . . . is not an absolute ‘must’ but a relative ‘must in view of.’ This relative modal phrase ‘must in view of’ has two arguments: a phrase like ‘what is known’ or ‘what is good for us’ etc. and a sentence. (1977: 341)

Five qualifications should be made from the start. First, I will only be considering the modal auxiliaries “might” and “must.” English has many other ways of expressing modality. There are further modal auxiliaries, including: “may”, “can”, “could”, “will”, “would”, “shall”, and “should.” There are quasi-modal verbs such as: “have

<sup>36</sup> Thanks to Daniel Rothschild for an insightful discussion on this point.

to”, “ought to”, and “need to.” And there are modal sentential adverbs, for instance: “possibly”, “probably”, “certainly”, and “necessarily” (which pattern with phrases like: “it is possible that”, “it is probable that”, “it is certain that”, and “it is necessary that”). Indeed, English can even generate modality without *any* overt modalizing element, in certain non-finite constructions such as: “Sandy is the person to call for computer help” (cf. Bhatt 2006). I will not be considering any of these other ways of expressing modal meanings.

Second, I do not believe that there is any such thing as an “epistemic modal” *per se* (see § 3.2 for further discussion). Still following Kratzer (1977), I take modals to involve a tripartite structure: [*Quantifier: Restrictor*] [*Scope*]. I take the *Restrictor* and the *Scope* positions to be occupied by propositions. This structure may then be read as: In *Quantifier* of the worlds such that *Restrictor*, *Scope*. Thus a natural epistemic reading of “Kate might be in Canberra” may be glossed via: In some of the worlds such that what is known holds, Kate is in Canberra. So called “epistemic modals” are merely modals whose restrictor involves some sort of epistemic proposition.<sup>37</sup>

Third, I take no stance on how to evaluate implicit restrictor arguments, save to piously intone that these are evaluated by context. I suspect that among the stereotypical settings for epistemic restrictors are (i) the speaker’s knowledge, and (ii) universal knowledge, with strong contextual cues needed to override the stereotypical settings. But nothing will turn on this.<sup>38</sup>

Fourth, while my sympathies are with syntactic relationalism for taste predicates (with a syntactically real experiencer argument), I am divided between syntactic and merely semantic relationalism for epistemic modals. Kratzer herself does not posit syntactic realization (p.c.). In my terminology (§ 1.1), she is a *semantic* relationalist. Von Stechow and Heim, on the other hand, do posit syntactic realization in their online lecture notes, speaking of modals as involving logical forms with “a kind of invisible pronoun, a free variable that stands for a set of possible worlds” (2007: 31). They continue: “The covert variable next to the modal picks up a contextually salient set of worlds, and this functions as the quantifier’s restrictor” (2007: 32). Thus they are syntactic relationalists. I will remain neutral on the syntactic status of restrictor arguments in what follows.

<sup>37</sup> *Point of clarification:* I will continue to speak of “epistemic modals” as modals restricted by an epistemic property. The point I am making is that no single element of the proposition expresses “epistemic modality”. Rather the epistemic modality of the proposition is determined compositionally by the modality of the modal plus the epistemicity of the restrictor.

<sup>38</sup> Embedding under attitude verbs *strongly tends* to shift the restrictor to an epistemic state of the subject of the lowest attitude. Thus in both “Ann thinks that there might be licorice in the cupboard” and “Ben thinks that Ann thinks that there might be licorice in the cupboard”, by far the most natural restrictor is to an epistemic state of Ann’s. I do not know why other readings are so difficult to generate.

Fifth (and perhaps most importantly), I will be relying almost exclusively on the binding test to argue for implicit restrictor arguments in bare epistemic modal claims like 2 and 56 (§ 3.1). The other tests used on taste predicates in § 2 are either inapplicable (for instance, the restrictor argument is not of the right type to control PRO), or unclear in verdict (for instance, the restrictor phrase can be made explicit, but it is unclear whether the phrase serves as an argument of the modal or an adjunct). Thus I can claim some decent evidence for meaning perspectivalism for epistemic modals, but nothing like a best-case result. The case for meaning perspectivalism for epistemic modals is not nearly as strong as the case with taste predicates. Though I will add a further broad-scale consideration for meaning perspectivalism for epistemic modals, based on *the unity of the modals* (§ 3.2).

### 3.1. *The binding test*

Recall (§ 2.1) that one leading diagnostic for semantic arguments is the possibility of binding them. I have illustrated with binding with respect to pronouns, “local”, “tasty”, and “fun.” It might prove useful to add one more illustration, involving quantifier domain restriction. Thus consider:

57. In every room, every wall is blue

Perhaps the only natural reading of 57 is the bound reading, on which 57 basically says that in room<sub>1</sub>, every wall in room<sub>1</sub> is blue, in room<sub>2</sub>, every wall in room<sub>2</sub> is blue, etc. There needn't be a single room containing every wall. The domain of the second quantifier is bound to the domain of the first. The existence of such a bound reading is the primary argument for the syntactic reality of quantifier domain restrictors in the influential discussion of Stanley and Szabó (2000). But—maintaining neutrality as between syntactic and semantic accounts of binding—I would at least say that the existence of the bound reading of 57 is excellent evidence for the presence of quantifier domain restrictor arguments in logical form. To the extent that modals serve semantically as quantifiers over worlds, it would be unsurprising to find a parallel case for modal restrictor arguments.

But there are complications in applying the binding test to epistemic modals, which stem from the fact that epistemic modals tend to move to the left periphery of the syntax, out-scoping any quantifiers that might on surface seem able to bind them. Thus consider:

58. Everyone must be guilty

Surface form notwithstanding, the “must” has managed to out-scope the quantifier. That is, 58 basically means that it must be the case that everyone is guilty. In general, according to von Stechow and Iatridou's (2003) *epistemic containment principle*, a quantifier cannot have scope over an epistemic modal (more technically: a quantifier cannot bind its trace across an epistemic modal).<sup>39</sup> Thus to apply the binding test properly,

<sup>39</sup> Epistemic modals project well above root (e.g. deontic and dynamic) modals. This may be illustrated via the following minimal pair, due to Brennan (1993):

one must create *islands*, which form syntactic barriers to modal movement. Here are five examples of epistemic modals marooned on islands:

59. If Billy and Suzy might be coming over, then you should hide the cookies
60. It is not the case that Billy must be guilty
61. If Billy might be the one who stole the cookies, then Suzy might be too
62. Ma thinks that Suzy must be the cookie thief
63. Any child who might be the cookie thief should provide an alibi immediately

The reader may confirm that giving the epistemic modal widest scope in any of 59–63 would produce unavailable readings. For instance, 60 clearly means that Billy’s innocence is still open. It does not go so far as to say that Billy’s innocence is certain. But giving the epistemic modal wide scope would produce just such a reading. Likewise giving the epistemic modal wide scope in 62 would give the reading that it must be the case that Ma thinks that Suzy is the cookie thief.

One can thus apply the binding test, as long as one is careful to keep the epistemic modal marooned beneath the higher quantifier. I begin with an extension of the pattern in 62. (I take 62 first to display a further confound for the binding test, which will be addressed by extending the patterns in 59–61 and 63.) Imagine that all the boys in Billy’s class have had a bad day. Billy failed the quiz, Tommy forgot his homework, Larry lost his glasses, and Kenny can’t find his notebook. Now consider:

64. Every boy thinks he must be stupid

64 has a bound reading, in which it basically means that Billy thinks he must be stupid in view of failing the quiz, Tommy thinks he must be stupid in view of forgetting his homework, etc. There need not be a single reason for believing oneself stupid common to every boy.<sup>40</sup> For another example (with “might” instead of “must”),

- (a) Every radio may get Chicago stations and no radio may get Chicago stations
- (b) \*Every radio can get Chicago stations and no radio can get Chicago stations

Sentence(a) is fine, because the epistemic modal has out-scoped the quantifier, to produce a reading that basically says that it may be the case either way, as to whether every radio gets Chicago stations or none do (cf. von Stechow and Iatridou 2003). But sentence (b) is semantically incoherent, because the dynamic modal has stayed under the quantifier. In Cinque’s (1999) hierarchy of projections, epistemic modals always merge above tense, while root modals always merge below aspect. The tendency of modals with epistemic restrictors to project so high may seem like evidence that they are extra-propositional force markers. It is as if they are fleeing the proposition entirely. But see Hacquard (2006) for an insightful account (within an overall Kratzer-style semantics) of why epistemic modals project so high, involving event binding and interaction with aspect. In any case I will shortly be offering multiple examples of *embedded* modals with epistemic restrictors. This is further evidence that they contribute to propositional content.

<sup>40</sup> This style of example is borrowed from Speas, who comments:

The set of propositions on which the conclusion “x must be stupid” is based . . . is different for every boy. [64] means that every boy has gone through some process of inference wherein some epistemic modal base led him to conclude that he is stupid. The content of this modal base will co-vary with the assignment of values to boys. Jim might think “Based on my report card full of F’s, the fact

imagine that all the girls in Suzy's class have had a good day. Suzy aced the quiz, Tara got all the homework questions right, Liz found Larry's lost glasses, and Anna hid Kenny's notebook. Now consider:

65. Every girl thinks she might be brilliant

65 has a comparable bound reading to 64.

But a second complication arises with respect to the bound readings of 64 and 65, since it might be thought that what is being bound is not the modal restrictor but rather some argument of the attitude verb. The presence of the attitude verb creates a syntactic barrier to the movement of the modal (the modal gets stuck inside the complement phrase). But could it be that the attitude verb is not *merely* creating a syntactic barrier to the leftward movement of the modal, but is also projecting the very argument being bound? Indeed, Lasersohn (2009: 365) suggests that certain attitude verbs project a judge variable, and so he might well hold that what is being bound in 64 and 65 is *not* any restrictor of the modal but rather the judge of the attitude. So the truth perspectivalist has an elegant way of accommodating 64 and 65.

Indeed the truth perspectivalist account of 64 and 65 can look very promising, since the existence of bound readings for 64 and 65 does not survive the removal of the attitude verb, but does survive the removal of the modal. That is, one does not find bound readings for:

66. Every boy must be stupid

67. Every girl might be brilliant

But one does find bound readings for:

68. Every boy thinks he is stupid

69. Every girl thinks she is brilliant

The friend of restrictor arguments for modals need not be too troubled by this. As mentioned with 58, the absence of bound readings for 66 and 67 is simply be due to the fact that the modal has managed to out-scope the quantifier. Moreover the presence of bound readings for 68 and 69 may well be due to the fact that the attitude verb has supplied a bindable argument (such as a world argument). But a clear example of binding *on a restrictor argument* is still needed.

At this point it is crucial to consider a wider range of syntactic tricks for creating barriers to modal movement, beyond embeddings in complements of attitudes. Here the patterns in 59–61 and 63 prove crucial. *There is binding of modal restrictors with other*

that I can't understand basic algebra and the fact that I can't read anything but comic books, I must be stupid." Jason might think "Based on the fact that I don't understand what Chomsky's saying in 'Derivation by Phrase' despite having read it 3 times, I must be stupid." Joe might think "Based on the fact that I thought for a while that Tiffany might actually go out with me, I must be stupid." (2004b: 268)

*syntactic barriers to modal movement, even without attitude verbs.* Take 59, where the modal is stuck within an “if-” clause instead. Now consider:

70. Anytime you are going for a walk, if it might rain, you should bring an umbrella
71. Whenever you have cookies in the house, if Suzy might come over, you should hide the cookies

Both 70 and 71 feature an epistemic modal stuck within an “if”-clause, and a higher situation quantifier. Both have natural bound readings. 70 basically says that in any situation in which you are going for a walk, if it might rain *given the evidence in that situation*, you should (in that situation) bring an umbrella. And 71 basically says that in any situation in which you have cookies in the house, if Suzy might come over *given the evidence in that situation*, you should (in that situation) hide the cookies.<sup>41</sup>

Here is another case to consider, extending the pattern of 63 in using free relatives to embed modals:

72. Every boy has a father who might be a genius

72 has a natural bound reading, which allows that different boys might have different and even incompatible rationales for regarding their respective fathers as geniuses (imagine 72 uttered by the school psychologist while pontificating on the general admiration boys have for their various fathers).

The remaining patterns in 60 and 61 can likewise be extended to produce bound readings under situation quantifiers, as per:

73. Sometimes it is not the case that Billy must be guilty
74. Usually if Billy might be the one who stole the cookies, then Suzy might be too

Hence I conclude that the argument of the attitude verb cannot explain all of the binding phenomena. Overall it seems that modal restrictors pattern with quantifier domain restrictors in allowing for bound readings, on any way whatsoever of preventing the modal from out-scoping the quantifier. The best explanation of the overall pattern is that modals take restrictor arguments.

### 3.2. *The unity of the modals*

A second consideration that I think favors meaning perspectivalism for epistemic modals concerns *the unity of the modals*. After all, modals are not always interpreted in an epistemic way. Thus consider:

<sup>41</sup> Egan, Hawthorne, and Weatherson provide a similar example, involving a military instructor training troops for jungle warfare who says: “Before you walk into an area where there are lots of high trees, if there might be snipers hiding in the branches, clear away the foliage with flamethrowers.” They offer the following gloss involving a bound reading: “Generally in situations where you are walking into an area where there are lots of high trees, if it’s consistent with *your party’s* knowledge that there are snipers hiding in the branches, use your flamethrowers to clear away the foliage” (2005: 143–4). They maintain their truth relativism (with its required perspective-neutrality about propositions) via skepticism of the binding test. My dispute with them might then spill over into a larger dispute concerning the proper diagnostics for semantic argument structure.

## 75. Billy might offer his cookies to Suzy

75 can be read as involving an epistemic modal (imagine a speech context where we are trying to guess what unpredictable Billy might do with his cookies). But 75 can also be read as involving a deontic modal, where it basically means that Billy is permitted to offer his cookies to Suzy (nothing wrong with offering cookies!), and 75 can also be read as involving a dynamic modal, where it basically means that Billy has the ability to make the offer (he is not so selfish as to be incapable of it), *inter alia*.

How does a sentence like 75 allow for all of these different readings? One option is to maintain that modals are *ambiguous*—or at least *polysemous*—so that there are at least three different sentences associated with 75, viz.:

75a. Billy might<sub>epistemic</sub> offer his cookies to Suzy

75b. Billy might<sub>deontic</sub> offer his cookies to Suzy

75c. Billy might<sub>dynamic</sub> offer his cookies to Suzy

But exactly how many sentences will we wind up with, in the end? In this vein, Kratzer asks:

How many kinds of ‘must’ do we have to distinguish? How many deontic ones? How many epistemic ones? How many dispositional ones? And how many preferential ones? Obviously many, many of each group. We do not just refer to duties. We refer to duties of different kinds. To different duties different persons have towards different persons at different times. We do not simply refer to a bit of knowledge and information—once and forever the same. We refer to different kinds of knowledge or information in different situations. (1977: 339)

Going down the ambiguity path for modals like “might” seems to threaten an explosion of meanings.

Moreover, going down the ambiguity path seems to miss a crucial generalization. In all of these readings of sentences like 75, “There is something in the meaning [that different occurrences of modals have] which stays invariable” (Kratzer 1977: 340). Kratzer’s key insight is that the unity of the modals lies in their quantificational force. For instance, “must” always expresses the universal quantifier over worlds. As von Stechow aptly summarizes this canonical view, “Modality is a category of linguistic meaning having to do with the expression of possibility and necessity” (2006: 20).

Indeed, the modals form a system within English. For instance, “must”, “necessarily”, and “it is necessary that” pattern together, as do “might”, “possibly”, and “it is possible that”, etc. This would be a remarkable coincidence given anything like ambiguity.<sup>42</sup> Why for instance should the various different meanings of “might”

<sup>42</sup> *Caveat*: There are some idiosyncracies amongst the modals. In the English modal system, some modal terms have lexicalized selection restrictions on the flavor of their restrictors. For instance, in English “it is possible that” does not naturally take deontic restrictors. Some of this may be due to lexical competition from terms like “permitted” and “allowed.” Still, the general contours of a system are in place.

Table 6.3 The modal system of English

|        | Epistemic | Deontic | Circumstantial | Future |
|--------|-----------|---------|----------------|--------|
| Strong | Must      | Must    | Must           | Will   |
| Weak   | Can       | Can     | Can            | Might  |

Table 6.4 The modal system of St'át'imcets (Lillooet Salish)

|        | Epistemic | Deontic | Circumstantial | Future |
|--------|-----------|---------|----------------|--------|
| Strong | K'a       | Ka      | —              | Kelh   |
| Weak   | K'a       | Ka      | Ka-a           | Kelh   |

systematically correlate with the various different meanings of “possibly” and “it is possible that”, in the same way on each modal meaning?

Moreover there is considerable unity to the modal systems found across natural languages. As Papafragou observes: “An interesting fact about the root and epistemic types of meaning is that they often tend to be expressed by a single class of modal expression in the languages of the world” (1998: 371), from which she concludes: “[a] purely ambiguous approach to the English modals can quickly be discredited” (1998: 371).

There is actually one very suggestive parameter of difference between modal systems of different natural languages. While some languages (including English) lexicalize the modal but do not lexicalize the restrictor, other languages (such as Salish) evince the opposite pattern, where the modal is implicit but the restrictor is what gets made explicit.<sup>43</sup> In Salish, the default quantificational force of modality is the universal quantifier of necessity, though the existential quantifier of possibility can be contextually cued. What one explicitly says is whether one is speaking of epistemic, deontic, circumstantial, or future modality. This pattern is elegantly summarized by Matthewson Rullmann, and Davis (2005), via Tables 6.3 and 6.4.

Given the unity of the modals, treatments requiring a special “epistemic modal” element may be eliminated from the start. Thus one cannot posit special indexical characters for “epistemic modals” (*contra* the meaning perspectivalist semantics of DeRose 1991), treat “epistemic modals” as special extra-propositional force markers (*contra* the expressivist semantics of Hare 1967), or give “epistemic modals” any special semantical clauses (*contra* the truth relativist semantics of MacFarlane this volume). Given unity, the only possible treatment of epistemic modality must derive epistemic modality compositionally, as a consequence of the quantificational force

<sup>43</sup> This can be understood as a variant form of the licensing test (c.f. § 2.2), in that there are other languages in which the argument in question cannot be left implicit. I thank Chris Kennedy for discussion here.

of the modal plus the epistemic property in the restrictor (cf. von Stechow and Heim 2007: 31–2).

Moreover, given the unity of the modals, at least some level of contextualism is required for sentences like 2 and 75. 75, for instance, is a single sentence that can express different propositions in different contexts, depending at minimum on the flavor of modality the context supplies.

But if the context must supply the flavor of modality for a sentence like 75, it is hard to see how context could do so in any way that avoids meaning perspectivalism. For if context flavors modals by supplying restrictor arguments, and if context flavors modals epistemically by providing a body of information relative to which the pre-jacent counts as possible (/necessary/etc.), then this body of information just *is* the specified perspective.

I do not mean to suggest that the truth perspectivist and absolutist have no possible way to account for the unity of the modals. Perhaps there are contexts that flavor a modal epistemically, but supply an inspecific restrictor argument, that says that a body of information is relevant (thus imparting epistemic flavor) without saying which body of information is relevant. But I do not know how this story could go.<sup>44</sup> So I think it fair to conclude that the truth perspectivist and absolutist owe a worked out account of how context can flavor a sentence like 75 in ways that do not yet yield meaning perspectivalism. Meaning perspectivalism is, at the least, a very natural consequence of the unity of the modals.

#### 4. Meaning Perspectivalism and Disagreement Cases

So far I have argued for meaning perspectivalism for taste predicates (§ 2) and for epistemic modals (§ 3), maintaining that the perspective at issue is always specified in the proposition. My approach has been a contextualist approach, insofar as I take the experiencer argument of the taste predicate, and the restrictor argument of the modal, to be supplied by context (in a non-constant way) when left implicit. But contextualist theories (and absolutist theories) are sometimes charged with mishandling disagreement cases, by not allowing for the prospect of *faultless disagreement* (Wright 2001, Kölbel 2004, MacFarlane 2007 *inter alia*). Indeed faultless disagreement has emerged as perhaps *the* major impetus towards relativist views. So in what remains I will discuss disagreement cases, and argue that the contextualist form of meaning perspectivalism I defend actually yields the best explanation, once one considers the full range and dynamics of disagreements. Thus I will conclude on a happy note: both the linguistic tests for argument structure, and the test of best explaining disagreement cases, converge on the meaning perspectivist view.

<sup>44</sup> Though I see how the story could go for the content relativism, if context could supply a restrictor argument involving PRO<sub>judge</sub> or some other element with an assessor-determined denotation.

Faultless disagreement is supposed to arise in dialogues involving taste predicates, like the following (imagine that Ann is a licorice lover, and Ben a licorice hater):

*Tasty Licorice*

*Ann:* Licorice is tasty

*Ben:* No, licorice is not tasty

Ann and Ben seem to be in disagreement, and yet one might also think that neither side is at fault, or in any way mistaken. As Lasersohn comments on cases of this nature, Ann and Ben are in some sense “disagreeing, even contradicting each other” (2009: 360), and yet “each of them is entitled to his or her views on this matter . . . neither one is ‘making a mistake’” (2009: 360).

The absolutist is said to have trouble capturing the intuition that neither side is in any way mistaken. Given absolutism, and assuming that what Ann says is the perspective-neutral proposition [licorice is tasty], then this proposition will simply be true or false (for a given world and time). Ann and Ben would be in disagreement over whether it is true or false. No matter how much Ann loves licorice, and no matter how much Ben hates it, one of them would just be flat wrong about the real tastiness of licorice.

The contextualist is said to have trouble capturing the intuition that there is any disagreement in the first place.<sup>45</sup> Given contextualism, and assuming that what Ann says is the perspective-specific proposition concerning her perspective [licorice is tasty to Ann], and that what Ben says is the perspective-specific proposition concerning him [licorice is not tasty to Ben], then there is no conflict whatsoever. Ann and Ben would merely be talking past each other (Wright 2001: 51). As MacFarlane puts the point, in a way that emphasizes the crucial role it plays in the debate:

The relativist’s central objection to contextualism is that it fails to account for the possibility of *disagreement* in subjective discourse—for our sense that when I say that carrots are delicious and you deny this, we are genuinely *disagreeing* with each other, and not making compatible claims about our respective tastes. (2007: 2)<sup>46</sup>

Though note that this particular way of putting the objection to contextualism assumes a simple and inflexible contextualist theory, on which the covert experiencer argument is always evaluated as the speaker.

The relativist, though, is said to be able to capture the phenomenon of faultless disagreement, by combining perspective-neutral propositions with a judge-supplemented index. Ann and Ben are said to be in disagreement over the perspective-neutral proposition [licorice is tasty]. But neither Ann nor Ben need be mistaken,

<sup>45</sup> The non-indexical contextualist is said to suffer a similar fate. Though it may be worth considering versions of non-indexical contextualism on which the position of the judge coordinate is initialized from the speech context in a more subtle way, perhaps via which perspective the speaker intends to discuss (§ 1.2), which need not always be her own.

<sup>46</sup> Though see Lasersohn (2009) and Weatherston (2009) for some further truth relativist arguments, which I will not attempt to address here.

since [licorice is tasty] may be true at  $\langle w^*, t^*, j_{Ann} \rangle$  but false at  $\langle w^*, t^*, j_{Ben} \rangle$ . So the idea is that Ann has said what is *true for Ann*, Ben has said what is *true for Ben*, and so neither is at fault in the dispute.

Similar cases arise with epistemic modals (imagine that Ann has no idea where the licorice is, but Ben has just checked the cupboard and is certain that it is licorice-free):

*Mighty Licorice*

*Ann*: The licorice might be in the cupboard

*Ben*: No, the licorice cannot be in the cupboard

For parallel reasons, it is said that the absolutist cannot capture the idea that no one is at fault, while the contextualist cannot capture the idea that there is real disagreement. And the relativist is said to be the only one who can do justice to faultless disagreement, by combining perspective-neutral propositions as the common object of disagreement, and a judge-supplemented index as the basis for faultlessness.

I will primarily be interested in comparing the prospects for an anti-contextualist truth relativist treatment of disagreement cases, with the kind of contextualistic meaning perspectivalism I defend. I will argue that the case for relativism relies on a misrepresentative sample of underdeveloped cases. Once one considers a wider range of disagreements, and situates them in larger dialogues, the contextualistic meaning perspectivalist approach will prove far superior to its anti-contextualist truth relativist rival. Thus in § 4.1 I will offer a wider range of cases, and situate them in larger dialogues. In § 4.2 I will maintain that the contextualist meaning perspectivalist view I have advocated achieves a nearly best-case result, in handling virtually all of the cases very well. And in § 4.3 I will argue that the anti-contextualist truth relativist meets with a nearly worst-case result, in having trouble with every single one of these cases.

I should mention—in light of my best-case result for meaning perspectivalism for taste predicates (§ 2), but weaker result for meaning perspectivalism for epistemic modals (§ 3)—that the following opportunity to buttress the case for epistemic modals arises. Given that meaning perspectivalism holds for taste predicates, and that the disagreement cases work in parallel ways for taste predicates and epistemic modals, the type of disagreement seen in both cases must at least be compatible with meaning perspectivalism. So meaning perspectivalism for epistemic modals can thereby be sheltered from objection. In other words, given the best-case result for experienter arguments for taste predicates, coupled with the appearance of faultless disagreement over taste claims, the question should no longer be *if* contextualism for epistemic modals can handle disagreement cases, but merely *how*.

#### 4.1. Disagreement cases

Is *Tasty Licorice* or *Mighty Licorice* a case of faultless disagreement? I doubt there is a fact of the matter. These cases, without any specified contexts or continuations to

consider, are too under-described. Note first that these cases are *dialogues*. It will help to illuminate what is happening in *Tasty Licorice* and *Mighty Licorice* to consider the role of dialogue (as opposed to Ann and Ben merely soliloquizing in separate rooms), as well as the various contexts they might be embedded in, and the various continuations available.

So imagine instead that Ann and Ben are merely soliloquizing in separate rooms, and drop the discourse marker “no” that Ben employs:

Soliloquies on Tasty Licorice

*Ann* [sitting alone in the living room, dreaming of licorice]: Licorice is tasty

*Ben* [standing alone in the kitchen, eyeing the licorice]: Licorice is not tasty

Soliloquies on Mighty Licorice

*Ann* [alone in the living room, dreaming of licorice]: The licorice might be in the cupboard

*Ben* [alone in the kitchen, eyeing an empty cupboard]: The licorice cannot be in the cupboard

By my lights at least, there is far less of a feeling of disagreement in these cases than in their dialogue counterparts.

For a more dramatic illustration of a case without disagreement—on the not implausible assumption that “sexy” is a predicate of personal taste—suppose that Ann and Ben are both heterosexual adults with some knowledge of the world, and consider:

Soliloquies on Fabio

*Ann* [alone in the living room, dreaming of Fabio]: Fabio is sexy

*Ben* [alone in the kitchen, considering his sexuality]: Fabio is not sexy

I think there should be very little feeling of disagreement in this case. If either were to learn of the others’ view, neither would feel compelled to provide arguments or to resolve any difference of opinion. Both would simply understand from the start that their sexual tastes differ. Indeed, it would be *utterly bizarre* to imagine a dialogue counterpart:

Sexy Fabio

*Ann* [leering at the cover of her romance novel]: Fabio is sexy

*Ben* [eyeing Ann’s novel and noting that Fabio does not excite him]: No, Fabio is not sexy

Ben, who is being assumed to have some knowledge of the world, simply would not respond in this way. If he did he would be at fault, in that he would have missed Ann’s point, or misunderstood something important about heterosexuality.

What the various *Soliloquy* cases show is that dialogue is playing a role in our intuitions of disagreement in the original *Tasty Licorice* and *Mighty Licorice* cases. In particular, it matters that Ann is speaking *to Ben*, and it matters that Ben is replying *to Ann*, and is prefacing his reply with a “no.” This needs explanation.

Now let us return to the dialogue cases, but go beyond the mere two-line exchange, and consider the various contexts these dialogues might be embedded in, as well as the various continuations Ann might offer. It seems to me that there are at least three main styles of continuation that are potentially available (assuming Ann continues this line of conversation at all), in ways that are shaped by the question under discussion. First, it is open to Ann to *entrench*, as in:

Entrenched Tasty Licorice

Ann: Licorice is tasty

Ben: No, licorice is not tasty

Ann: Listen, I was just saying that *I* like it

Entrenched Mighty Licorice

Ann: The licorice might be in the cupboard

Ben: No, the licorice cannot be in the cupboard

Ann: Look, I just meant that *I* thought it might be there.<sup>47</sup>

Such a continuation is especially likely if Ann feels a need to defend herself. For instance, she might have been asked to name her favorite treat:

Entrenched Tasty Licorice in Context

Ben: Hey Ann, I'd like to buy you a gift. What's your favorite treat?

Ann: Licorice is tasty

Ben: No, licorice is not tasty

Ann: Listen, I was just saying that *I* like it

Or she might have been asked to explain why she is running so hopefully towards the cupboard:

Entrenched Mighty Licorice in Context

Ben: Hey Ann, why on earth were you running towards the cupboard?

Ann: The licorice might be in the cupboard

Ben: No, the licorice cannot be in the cupboard. So that cannot be the explanation.

Ann: Look, I was just saying that *I* thought it might be there

Situated in this way, I think it is hard to sustain any original intuition that Ann and Ben were in real disagreement. Ann seems to be telling Ben that he has misunderstood what she was saying. And she seems right.

Entrenchment is especially plausible in cases like the following:

Mighty Agent

Bush [just before invading Iraq]: Tell me, to the best of your current knowledge: do the Iraqis have weapons of mass destruction?

<sup>47</sup> In this vein, von Stechow and Gillies note: "The basic observation is that *solipsistic* readings for the modals—readings on which the modals quantify over the evidence available to the speaker at the time of utterance—are virtually always available" (2008: 82).

*Honest Agent:* We just don't know. Our intelligence is extremely poor. The Iraqis might have weapons of mass destruction. But it is difficult to say anything with confidence.

[Months pass, Bush invades, the Iraqis prove not to have such weapons. Bush summons Honest Agent back to the Oval Office.]

*Bush:* What you told me before proved false. You're fired.

Clearly Honest Agent has been mistreated. She evidently was only speaking of the current knowledge of the CIA at the time. She should complain that Bush has quite blatantly misunderstood and mistreated her. Or consider "might and might not" constructions such as:

*Might-or-Might-noty Agent*

*Bush* [just before invading Iraq]: Tell me, to the best of your current knowledge: do the Iraqis have weapons of mass destruction?

*Honest Agent:* We just don't know either way. Our intelligence is extremely poor. The Iraqis might have weapons of mass destruction. But they might not. It is difficult to say anything with confidence.

*Cheney:* We are going to invade. We will find out whether or not the Iraqis have weapons of mass destruction. At that point one of the things you just said will prove false. So you're fired right now.

Again Honest Agent has been mistreated. She should complain that Cheney has quite blatantly misunderstood and mistreated her. Indeed anyone who utters a "might or might not" sentence will have said something incoherent by absolutist lights, and something doomed to falsification (should the truth emerge) by the lights of the truth relativist.

A second possible continuation open to Ann is to *retract* her original claim, as in:

*Retracted Tasty Licorice*

*Ann:* Licorice is tasty

*Ben:* No, licorice is not tasty

*Ann:* Okay, I was wrong

*Retracted Mighty Licorice*

*Ann:* The licorice might be in the cupboard

*Ben:* No, the licorice cannot be in the cupboard

*Ann:* Fair enough, I was wrong

Such a continuation is especially likely if Ann was asked to speak on behalf of both Ann and Ben:

*Retracted Tasty Licorice in Context*

*Claire:* Hey Ann and Ben, I'd like to buy you two a treat. What would you two like?

*Ann:* Licorice is tasty

*Ben:* No, licorice is not tasty

*Ann:* Okay, I was wrong

Retracted Mighty Licorice in Context

*Claire:* Hey Ann and Ben, why were you two both running over to the cupboard?

*Ann:* The licorice might be in the cupboard

*Ben:* No, the licorice cannot be in the cupboard

*Ann:* Fair enough, I was wrong

Retraction is especially plausible in cases where Ann defers to Ben's expertise on the topic. Thus imagine that Ben is a wine connoisseur, and Ann is attending Ben's seminar on wine:

Retracted Tasty Wine in Context

*Ben:* Thanks for coming to my seminar, Ann. Let's see what you've learned! Tell me about this Mad Dog strawberry kiwi flavored wine.

*Ann:* The wine is tasty

*Ben:* Hmmmm . . . no, the wine is not tasty

*Ann:* Okay, I obviously have a lot to learn! Tell me what you are reacting to in the flavor.

Situated in this way, I think it is hard to sustain any original intuition that Ann's claim is faultless. Or at least, Ann seems to be conceding fault.

A third possible continuation open to Ann is to *debate*, which might take a substantive form.

Substantive Debate on Tasty Licorice

*Ann:* Licorice is tasty

*Ben:* No, licorice is not tasty

*Ann:* But consider the warmth of the anise

Substantive Debate on Mighty Licorice

*Ann:* The licorice might be in the cupboard

*Ben:* No, the licorice cannot be in the cupboard

*Ann:* But consider the suspicious bulge under the napkins

Or the debate might degenerate into mere denial:

Mere Denial on Tasty Licorice

*Ann:* Licorice is tasty

*Ben:* No, licorice is not tasty

*Ann:* Yes it is

Mere Denial on Mighty Licorice

*Ann:* The licorice might be in the cupboard

*Ben:* No, the licorice cannot be in the cupboard

*Ann:* Yes it might

Such continuations are especially likely if Ann was asked to speak on behalf of the expert, and neither Ann nor Ben defers to the other on the matter at issue. Thus consider:

*Substantive Debate on Tasty Wine in Context*

*Claire:* Hey Ann, you know wines, is this wine tasty?

*Ann:* The wine is tasty

*Ben:* No, the wine is not tasty

*Ann:* But consider the subtle hints of blackberry

*Substantive Debate on History in Context*

*Claire:* Hey Ann, you know your politics, did Bush know that the Iraqis had nothing to do with the terrorist attacks of September 11<sup>th</sup>?

*Ann:* Bush might have known that

*Ben:* No, Bush could not have known that

*Ann:* But consider the idiocy and cynical hypocrisy he evinced on so many other occasions

Here at last we see sustained disagreement, with no concession of fault. But the conversation has only just begun. It is Ben's turn now, and he himself could entrench, retract, or continue the debate (substantively, or by mere denial). If Ben entrenches then there is no longer disagreement. If Ben retracts then he has conceded fault. *Only if both sides are in principle disposed to debate forever can any appearance of faultless disagreement arise.*

In summary, there seem to be several divisions to be drawn among disagreement cases, in ways—for the dialogues—which are connected to the question under discussion (See Fig. 6.8).

A successful account of disagreement cases needs to explain not only the appearance of faultless disagreement that might perhaps arise if both parties are in principle disposed to debate forever, but overall needs to explain the following six points:

- D1** Why soliloquies produce less of an intuition of disagreement than dialogues
- D2** Why entrenchment is possible, especially in certain contexts
- D3** Why retraction is possible, especially in certain contexts
- D4** Why substantive debate is possible, especially in certain contexts
- D5** Why mere denial is possible, especially in certain contexts
- D6** Why mere denial cases can generate an appearance of faultless disagreement

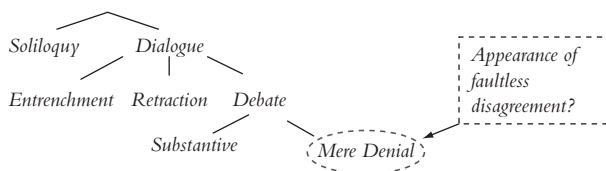


Fig. 6.8.

#### 4.2. *Meaning perspectivalism and disagreement*

I will now argue that the sort of contextualistic meaning perspectivalism I advocate provides a natural and plausible explanation for D1–D5, and has considerable prospects for explaining the appearance of faultless disagreement as per D6. This is a nearly best-case result.

Starting with the role of dialogue in D1, this is essentially a context effect. Compare *Tasty Licorice* to *Soliloquies on Tasty Licorice*. For the meaning perspectivalist, the fact that Ann has said “Licorice is tasty” to Ben makes it seem less likely that Ann is merely intending to report her own personal taste, and more likely that she is intending to report some shared standard (all else being equal). The fact that Ben both speaks to Ann, and marks his reply with “no” signals his intention to be understood as negating Ann’s claim. This is a context-driven difference between dialogue and soliloquy, and it explains why in soliloquies we often do have the intuition that the two parties are talking past each other. And this is why disagreement turns bizarre in dialogues where it is obvious to all that there is no shared standard, such as *Sexy Fabio*. All else is not equal. The addition of dialogue does not make it seem any more likely that Ann is intending to report some shared standard, which is why Ben’s “no” becomes bizarre.

Turning to the possibility of entrenchment as per D2, this is possible to the extent that an interpretation of the perspective at issue is available which excludes Ben. This includes solipsistic speaker-only interpretations, but also interpretations that involve wider groups:

*Entrenched Tasty Licorice in a Group-Reading Context*

*Ben:* Hey Ann, I’d like to buy you and Claire a gift. What sort of treat do you two like?

*Ann:* Licorice is tasty

*Ben:* No, licorice is not tasty

*Ann:* Listen, I was just saying that *we* like it

In such cases Ann has every right to tell Ben that he has misunderstood her. This is why—to return to the original *Entrenched Tasty Licorice in Context*—setting the context with a question about what Ann likes (as opposed to a question about what Ann and Ben both like) helps to license entrenchment. Such a context makes the [licorice is tasty to Ann] reading much more likely.

Moving on to the possibility of retraction in D3, this is possible to the extent that the one subject may grant that the other has better information about the perspective at issue. This can even happen in solipsistic readings, in the unusual case where someone grants that another person has better information about their own perspective than they do. Thus consider:

*Retracted Frog Legs in Context*

*Ma:* Hey Pa, what are you going to order at this fine French bistro?

*Pa:* Frog legs are tasty

*Ma:* Now Pa, you know that you don't like that sort of thing—you know you prefer salads

*Pa:* Of course you are right Ma. What would I do without you?

Or consider *Retracted Tasty Wine*. Why can Ann retract? Because she might have expressed something like [licorice is tasty to the expert], and regard Ben as having better access to the expert perspective. If so she should retract, by her own lights. This is why setting the context with explicit deference helps to produce retraction. Such a context makes a reading involving a public standard much more likely.

Continuing with the possibility of substantive debate as with D4, this is possible to the extent that each subject may consider herself at least as informed as the other, with respect to the perspective at issue. Thus consider *Substantive Debate on Tasty Licorice*. In such cases Ann has every right to explain to Ben what features of the licorice she is recognizing. This is why setting the context with explicit invocation of an expert standard helps to produce substantive debate, at least for those articulate enough to engage in it.

Indeed, the prospects for mere denial in D5 receive the same explanation as the prospects for substantive debate, and the contextual effect is the same in both cases. Mere denial is just an inarticulate version of substantive debate.

So far, so good. The sort of contextualistic meaning perspectivalism I advocate provides a natural and plausible explanation for D1–D5. It remains to consider the appearance of faultless disagreement as per D6. I think my approach has at least three possible ways to explain this appearance. First, the faultlessness in question might be *merely epistemic*. Perhaps Ann and Ben are disputing the proposition [licorice is tasty to the expert], and perhaps each has some reason to uphold their side of the dispute. In that sense each would be disputing responsibly, on the basis of what they took to be the good evidence. But they would just fail to converge on a common conclusion. Such a model is akin to the scenario in *Substantive Debate on History in Context*, and other cases where different historians might draw different conclusions about the historical record, or cases where different political partisans might draw different conclusions, such as:

*Mere Denial on Politics in Context*

*Claire:* Hey Ann and Ben, I know you have different political views—what do you guys think about Bush? Was he a mere puppet of the oil industry and other moneyed interests?

*Ann:* Bush was a mere puppet of the moneyed interests

*Ben:* No, Bush was not a mere puppet of the moneyed interests

*Ann:* Yes he was

*Ben:* No he wasn't

In such a case there is a single factual claim in dispute (I assume that [Bush was merely a puppet of the moneyed interests] is not a matter whose truth or falsity depends on your perspective—but change the example if you think otherwise). One of Ann or Ben

is speaking falsely. But each might still be speaking responsibly, insofar as each might conceivably find some support from the historical record (again, change the example if you think otherwise). The opponent of meaning perspectivalism needs to explain how the matter of faultless disagreement relevantly differs from the kind of intractable disputes one finds between political partisans concerning what are evidently matters of objective fact.

Second and relatedly, the dispute in question might only concern *implicatures* (or other matters downstream from the propositions at issue). Thus consider:

*Anchovy Pizza?*

*Ben:* Hey Ann, which topping should we get on the pizza?

*Ann:* Anchovies are tasty

*Ben:* No, anchovies are not tasty

*Ann:* Yes they are

*Ben:* No they aren't

In such a context it strikes me as plausible that Ann and Ben are each speaking about their own perspective, so that Ann's first assertion, relative to its speech context, expresses [Anchovies are tasty to Ann], while Ben's first assertion, relative to its speech context, expresses [Anchovies are not tasty to Ben]. Does this mean that Ann and Ben are talking past each other? *Not at all*. They are indirectly disputing which topping to get on their pizza. The 'debate' over what is tasty is playing a political role—via implicature—as to how Ann and Ben should coordinate their actions.<sup>48</sup>

Third and finally, the meaning perspectivalist might consider deviating from orthodoxy in allowing there to be a plurality of speech contexts that are in some way associated with a given sentence tokening. On one version of this view, it might be *indeterminate* as to which is the exact speech context. Thus von Fintel and Gillies offer "the metaphor of 'a cloud of admissible contexts' with respect to which the sentence might be interpreted" (2008: 96). Or there might be a *determinate* plurality of speech contexts. Or one might even adopt the *context relativist* view (§ 1.4), on which the unique and determinate speech context *for Ann* might differ from the unique and determinate speech context *for Ben*. Any such approach—in order to avoid the charge of *ad hoc*ery—must provide independent motivation for positing this plurality of contexts, and independent evidence that such can lead to an appearance of faultless disagreement. Of special interest is the case of singular "you" sentences

<sup>48</sup> Such a treatment is especially plausible with epistemic modals, given the known tendency of denials to merely target the implicated scopal proposition. Thus Simons speaks of the scopal proposition as often constituting "the main point of the utterance" (2007: 1035; cf. von Fintel and Gillies 2008: 82–3). She offers the following examples:

*Ann:* Why isn't Louise coming to our meetings these days?

*Ben:* Henry thinks that she's left town.

*Claire:* a. But she hasn't. I saw her yesterday in the supermarket.

b. No he doesn't. He told me he saw her yesterday in the supermarket. (2007: 1041)

addressed to a crowd, such as when the preacher tells the congregation “Jesus loves you” (§ 1.4). If this is to be understood vis-à-vis a plurality of speech contexts (perhaps even via context relativism), and can be shown to lead to an appearance of disagreement between members of the congregation, then such independent evidence and motivation would exist. Thus imagine that there is a Jesus, who in fact loves Ann but not Ben, and consider:

*Faultless Disagreement in the Pews?*

*Preacher:* Jesus loves you

*Ann* [in the audience, feeling beloved]: Yes, that’s true

*Ben* [in the audience next to Ann, feeling nothing]: No, that’s not true

Ann and Ben seem at least superficially to be in disagreement, but only because (given context relativism) they are evaluating the preacher’s sentence at different contexts.

#### 4.3. *Truth relativism and disagreement*

The sort of contextualistic meaning perspectivalism I advocate achieved a nearly best-case result across the full range of disagreement cases, providing a natural and plausible explanation for D1–D5, and considerable prospects for explaining the appearance of faultless disagreement in D6. It is time to consider whether anti-contextualistic truth relativism can do better. I will now argue that such an approach fails to explain any of D1–D4, and has even worse prospects for providing a principled explanation of D5–D6. This is a nearly worst-case result.

Starting with the intuitive difference between soliloquies and dialogues in D1, it would seem that everything the truth relativist says about the dialogue case should apply equally to the soliloquy case. In both cases the truth relativist—given her anti-contextualism—would treat the proposition expressed as perspective-neutral, and in both cases the propositions expressed will have the status of being true for Ann but false for Ben. Thus for instance in both *Soliloquies on Fabio* and in *Sexy Fabio* she will presumably see Ann and Ben both expressing [Fabio is sexy], with that content true for Ann but false for Ben. But if that is the basis for faultless disagreement, why is *Sexy Fabio* so obviously not a case of faultless disagreement? In general the truth relativist seems to accord no role to dialogue.

Turning to the possibility of entrenchment as with D2, it is mysterious how the truth relativist can allow for entrenchment. She sees Ann as initially expressing a perspective-neutral proposition such as [licorice is tasty], and that retreating to a different perspective-specific proposition [licorice is tasty to Ann] with very different truth conditions. Ben ought to feel cheated. Given truth relativism, Ben ought to be able to rejoin: “Well, *that* may be true but that is another matter entirely. That is not what you said. Quit changing the topic.” Yet obviously Ben cannot so rejoin.

Moreover, the truth relativist offers no account of why entrenchment is more acceptable in some contexts than others. For instance, in *Entrenched Tasty Licorice in Context*, the fact that Ann was asked a question about what she likes seems to play a role in allowing her to entrench, and likewise the context in *Mighty Agent*

seems to play a role in making entrenchment so likely. But if we are dealing with perspective-neutral propositions evaluated from judge positions either way (given an anti-contextualist approach), then no role is allotted to context.

Moving on to the possibility of retraction as per D3, it is mysterious how the truth relativist could motivate retraction. Consider *Retracted Tasty Licorice in Context*. For the truth relativist, Ann has expressed the perspective-neutral proposition [licorice is tasty], and this proposition presumably remains true for Ann—her taste buds have not suddenly transformed. Perhaps Ann discovers that this proposition is false for Ben. But when she evaluates the proposition, she is still the judge, so she should continue to find it true. Yet obviously Ann may well retract. Moreover, the truth relativist offers no account of why retraction is more acceptable in some contexts than others. For instance, in *Retracted Tasty Licorice in Context*, the fact that Ann was asked a question about what both she and Ben like seems to play a role in leading her to retract.

Continuing with the possibility of substantive debate in D4, it is mysterious how the truth relativist could motivate any substantive debate. With *Debated Licorice*, if the underlying facts are that [licorice is tasty] is true for Ann but false for Ben, then what is Ann doing appealing to something like the warmth of the anise? Why is she providing reasons at all? She should just recognize that Ben doesn't like licorice and be done. And again the impact of context seems ignored. An explanation is needed for why debate is more acceptable when the question concerns the taste of the expert.

The prospect of mere denial in D5 seems likewise mysterious. In general, if two people merely occupy different positions with respect to a baseline index coordinate, and evaluate a proposition differently purely on this basis, then there seems no sense in which they would disagree at all. Thus—continuing to work with the baseline assumption of world and time coordinates in the index—imagine two people at different times, evaluating a time-neutral proposition. For instance, imagine that it is raining on Monday but no longer raining on Tuesday, and that Ann evaluates [it is raining] as true on Monday, while Ben evaluates [it is raining] as false on Tuesday. There is no sense in which they are in any disagreement. If Ben were to take himself as contradicting Ann's claim from the previous day ("Hah! Ann was wrong!"), he would merely be displaying a misunderstanding.<sup>49</sup>

For a more dramatic illustration of a case where merely occupying different positions with respect to the time coordinate produces no sense whatsoever of disagreement, imagine that Suzy is hopping up and down on her pogo stick, with Ma and Pa proudly providing a running commentary.

<sup>49</sup> For a comparable case involving different positions on the world coordinate, consider the proposition [Kennedy is dead], and suppose that it is affirmed by Ann at 1980 in actuality, but denied by Dave at 1980 in a world in which Kennedy was never assassinated and lived past 1980. If Ann imagines Dave's scenario, she presumably would not imagine herself and Dave to be in disagreement, or feel any pressure to provide reasons. She would simply appreciate that Dave is being imagined to speak of a very different possibility.

*Pogo*

Ma [at t1]: She's up!

Pa [at t2]: She's down!

Ma [at t3]: She's up!

Pa [at t4]: She's down!

[... and so on for the next hour]

It would be utterly bizarre to imagine that Ma and Pa are in any disagreement in *Pogo*. (Imagine Billy listening to all of this, and demanding that Ma and Pa stop arguing with each other. That would display a deep misunderstanding on Billy's part.)

Of course the truth relativist need not think that her judge coordinate works the same as a time or world coordinate, vis-à-vis generating a sense of disagreement that could trigger mere denial. But now she has no precedent to draw upon, and is in danger of proceeding in a purely *ad hoc* manner, to find some way to handle the one bit of disagreement data that her theory still has some prospect of handling. This is not a good result, especially for a theory whose main selling point has been accounting for disagreement cases.<sup>50</sup>

The appearance of faultless disagreement asked after in D6 is thus elusive as well, for the truth relativist. Ma and Pa are not in disagreement at all in *Pogo*, and so *a fortiori* not in faultless disagreement. Any attempt at denial would be utterly bizarre:

*Pogo in Denial*

Ma [at t1]: She's up!

Pa [at t2]: No, she's not—she's down!

Ma [at t3]: That's false—she's not down, she's up!

Pa [at t4]: How wrong you are! She's down!

It is no accident that truth relativism has no explanation for the role of dialogue, or for the possibility of entrenchment, retraction, or substantive debate, or for the ways in which the question under discussion in the context may shape these possibilities. This is because truth relativists have typically worked with just one or two underdeveloped cases along the lines of *Tasty Licorice* and *Mighty Licorice*, and have assumed that all disagreement cases are mere denials, as emerges in the following passage from MacFarlane:

This account captures the distinctive phenomenology of disagreement about matters whose truth is relative. The challenger thinks (rightly) that he has absolutely compelling grounds for

<sup>50</sup> Along these lines, MacFarlane (2007)—noting that the occupation of different world or time positions does not yet engender a sense of disagreement—proposes the following as a working definition of disagreement:

If (there are parties  $s_1$  and  $s_2$ , a proposition  $p$ , and a context  $c$ , such that (i)  $s_1$  accepts  $p$  but  $s_2$  denies  $p$ , and (ii)  $s_1$ 's acceptance of  $p$  and  $s_2$ 's denial of  $p$  cannot both be accurate as assessed from  $c$ ), then there is disagreement between  $s_1$  and  $s_2$  over  $p$  with respect to  $c$ .

This does by and large allow the relativist to at least explain mere denials. But it seems to me *ad hoc*, and certainly can claim no precedent for the special role it accords the assessor.

thinking that the assertion was not accurate. But the original asserter thinks (also rightly, from her point of view) that the challenger's grounds do nothing to call into question the accuracy of the assertion. The asserter's vindication will seem to the challenger not to show that the assertion was accurate, and the challenger will continue to press his claim. (Until the game gets boring.) (2007: 20)

Perhaps MacFarlane is right about “the distinctive phenomenology” of one very particular sort of disagreement, which degenerates into an endless series of mere denials. My point is that there are many other ways that disagreements may unfold in various contexts, which the literature seems not to have yet considered, and which the truth relativist seems unable to explain.

There is one last move that the truth relativist might consider, which is to waive her anti-contextualism, and thereby handle D1–D4 as all concerning perspective-specific propositions (with the perspective at issue supplied by context). She would reserve perspective-neutral propositions and the relativist machinery for handling D5–D6.<sup>51</sup> This strikes me as awfully heavy machinery to haul in for a very small job, especially given the various alternative explanations of the appearance of faultless disagreement available to the meaning perspectivalist without recourse to truth relativism (§ 4.2), and how problematic the truth relativist explanation of D5–D6 turns out to be on closer inspection. While I cannot rule out this option completely, I suspect that few who have been attracted to truth relativism would be happy to see its explanatory role diminished to such an extent. Though perhaps other completely independent rationale could be provided for truth relativism. I have only argued that disagreement cases provide no such rationale.<sup>52</sup>

I can thus conclude on a happy note. Both the linguistic tests for argument structure, and the test of best explaining disagreement cases, converge on a contextualist meaning perspectivalist view.

## References

- Bach, Kent (1994). “Conversational Implicature”, *Mind and Language* 9: 124–62.  
 Bhatt, Rajesh (2006). *Covert Modality in Non-finite Contexts* (Berlin: de Gruyter).  
 — and Pancheva, Roumyanal (2006). “Implicit Arguments”, *The Blackwell Companion to Syntax* (Oxford: Basil Blackwell), 554–84.

<sup>51</sup> In effect this is comparable to the position of content relativists (e.g. Stephenson 2007, Egan 2009), except that they do not recognize perspective-neutral propositions, but rather a plurality of propositions with different specified perspectives for different assessors. They too would presumably reserve their machinery for D5–D6.

<sup>52</sup> MacFarlane has also argued for a relativist treatment of future contingents (2003) and knowledge claims (2005b). I cannot discuss these issues here. Though it may be worth noting that MacFarlane's arguments in all these areas draw heavily on disagreement cases, so to the extent that I have shown that truth relativism does not provide a plausible account of disagreement, I have cast doubt on the case for truth relativism in all these domains. That said, it is certainly compatible with the arguments of the main text that some other rationale could be provided for truth relativism in these or other domains.

- Brennan, Virginia (1993). *Root and Epistemic Modal Auxiliary Verbs*, Ph. D. thesis, University of Massachusetts-Amherst.
- Brogaard, Berit (2008). "Moral Contextualism and Moral Relativism", *Philosophical Quarterly* 58: 385–409.
- Cappelen, Herman, and Hawthorne, John (2009). *Relativism and Monadic Truth* (Oxford: Oxford University Press).
- Cappelen, Herman, and Lepore, Ernest (2005). *Insensitive Semantics: A Defense of Semantic Minimalism and Speech Act Pluralism* (Oxford: Basil Blackwell).
- Chomsky, Noam (1981). *Lectures on Government and Binding* (Dordrecht: Foris).
- Cinque, Guglielmo (1999). *Adverbs and Functional Heads: A Cross-Linguistic Perspective* (Oxford: Oxford University Press).
- DeRose, Keith (1991). "Epistemic Possibilities", *Philosophical Review* 100: 581–605.
- Egan, Andy (2007). "Epistemic Modals, Relativism, and Assertion", *Philosophical Studies* 133: 1–22.
- (2009). "Billboards, Bombs, and Shotgun Weddings", *Synthese* 166: 251–79.
- Hawthorne, John and Weatherson, Brian (2005). "Epistemic Modals in Context", in Gerhard Preyer and Georg Peter (eds.), *Contextualism in Philosophy: Knowledge, Meaning, and Truth* (Oxford: Oxford University Press), 131–68.
- Epstein, Samuel (1984). "Quantifier-Pro and the LF Representation of PROarb", *Linguistic Inquiry* 15: 499–505.
- Fiengo, Robert, and May, Robert (1994). *Indices and Identity* (Cambridge, Mass.: MIT Press).
- von Stechow, Kai (2006). "Modality and Language", in Donald Borchert (ed.), *Encyclopedia of Philosophy* (2nd edn., Detroit: Macmillan Reference), x. 20–7.
- Gillies, Anthony (2008). "CIA Leaks", *Philosophical Review* 117: 77–98.
- Heim, Irene (2007). *Intensional Semantics*, Online Lecture Notes, MIT.
- Iatridou, Sabine (2003). "Epistemic Containment", *Linguistic Inquiry* 34: 173–98.
- Glanzberg, Michael (2007). "Context, Content, and Relativism", *Philosophical Studies* 136: 1–29.
- Hacquard, Valentine (2006). *Aspects of Modality*, Ph. D. thesis, Massachusetts Institute of Technology.
- Hajicová, Eva, Partee, Barbara, and Sgall, Petr (1999). *Topic-Focus Articulation, Tripartite Structures, and Semantic Content* (Dordrecht: Kluwer).
- Hare, R. M. (1967). "Some Alleged Differences between Imperatives and Indicatives", *Mind* 76: 309–26.
- Kaplan, David (1989). "Demonstratives", in Joseph Almog, John Perry, and Howard Wettstein (eds.), *Themes from Kaplan* (Oxford: Oxford University Press), 481–563.
- Kennedy, Chris (2007). "Vagueness and Grammar: The Semantics of Relative and Absolute Gradable Adjectives", *Linguistics and Philosophy* 30: 1–45.
- King, Jeffrey C. (2003). "Tense, Modality, and Semantic Values", *Philosophical Perspectives* 17: 195–245.
- Kölbel, Max (2004). "Faultless Disagreement", *Proceedings of the Aristotelian Society* 104: 53–73.
- Kratzer, Angelika (1977). "What 'must' and 'can' must and can mean", *Linguistics and Philosophy* 1: 337–55.

- (1991). “Modality”, in Arnim von Stechow and Dieter Wunderlich (eds.), *Handbook of Semantics* (New York: de Gruyter), 639–50.
- Landau, Idan (2000). *Elements of Control: Structure and Meaning in Infinitival Constructions* (Dordrecht: Kluwer).
- Laserson, Peter (2005). “Context Dependence, Disagreement, and Predicates of Personal Taste”, *Linguistics and Philosophy* 28: 643–86.
- (2009). “Relative Truth, Speaker Commitment, and Control of Implicit Arguments”, *Synthese* 166: 359–74.
- Lewis, David (1980). “Index, Context, and Content”, in Stig Kanger and Sven Ohman (eds.), *Philosophy and Grammar* (Dordrecht: Reidel), 79–100.
- Ludlow, Peter (2008). “Cheap Contextualism”, *Philosophical Issues* 18: 104–29.
- MacFarlane, John (2003). “Future Contingents and Relative Truth”, *Philosophical Quarterly* 53: 321–36.
- (2005a). “Making Sense of Relative Truth”, *Proceedings of the Aristotelian Society* 105: 321–39.
- (2005b). “The Assessment Sensitivity of Knowledge Attributions”, *Oxford Studies in Epistemology* 1: 197–233.
- (2007). “Relativism and Disagreement”, *Philosophical Studies* 132: 17–31.
- (2009). “Non-Indexical Contextualism”, *Synthese* 166: 231–50.
- (this volume). “Epistemic Modals are Assessment-Sensitive”, Ch. 5.
- Mathewson, Lisa, Rullmann, Hotze, and Davis, Henry (2005). “Modality in St’at’imcets”, in J. C. Brown, Masaru Kiyota, and Tyler Peterson (eds.), *Papers for the 40th International Conference on Salish and Neighboring Languages* (Vancouver: University of British Columbia Linguistics Department), 166–83.
- Merchant, Jason (2001). *The Syntax of Silence: Sluicing, Islands, and the Theory of Ellipsis* (Oxford: Oxford University Press).
- Papafragou, Anna (1998). “The Acquisition of Modality: Implications for Theories of Semantic Representation”, *Mind and Language* 13: 370–99.
- Partee, Barbara (1973). “Some Structural Analogies between Tenses and Pronouns in English”, *Journal of Philosophy* 70: 601–10.
- (1989). “Binding Implicit Variables in Quantified Contexts”, *Proceedings of the Chicago Linguistics Society* 25: 342–65.
- Percus, Orin (2000). “Constraints on Some Other Variables in Syntax”, *Natural Language Semantics* 8: 173–229.
- Recanati, François (2004). *Literal Meaning* (Cambridge: Cambridge University Press).
- Richard, Mark (2003). “Introduction to Part I”, in Aleksandar Jokic and Quentin Smith (eds.), *Time, Tense, and Reference* (Cambridge, Mass.: MIT Press), 25–48.
- Rothschild, Daniel, and Segal, Gabriel (2009). “Indexical Predicates”, *Mind and Language* 24: 467–93.
- Schaffer, Jonathan (*forthcoming*). “Necessitarian Propositions”, *Synthese*.
- (MS) “Confessions of a Schmentencite: Towards an Index-Free Semantics.”
- Schlenker, Philippe (2005a). “The Lazy Frenchman’s Approach to the Subjunctive: Speculations on Reference to Worlds and Semantic Defaults in the Analysis of Mood”, in Twan Geerts, Ivo van Ginneken, and Haike Jacobs (eds.), *Romance Languages and Linguistic Theory 2003* (Amsterdam: John Benjamins Publishing), 269–309.

- (2005b). “Non-Redundancy: Towards a Semantic Reinterpretation of Binding Theory”, *Natural Language Semantics* 13: 1–92.
- Simons, Mandy (2007). “Observations on Embedding Verbs, Evidentiality, and Presupposition”, *Lingua* 117: 1034–56.
- Soames, Scott (2005). “Naming and Asserting”, in Zoltán Gendler Szabó (ed.), *Semantics Versus Pragmatics* (Oxford: Oxford University Press), 356–82.
- Speas, Margaret (2004a). “Evidentiality, Logophoricity, and the Syntactic Representation of Pragmatic Features”, *Lingua* 114: 255–76.
- (2004b). “Evidential Paradigms, World Variables, and Person Agreement Features”, *Rivista di Linguistica* 16: 253–80.
- Stanley, Jason (2000). “Context and Logical Form”, *Linguistics and Philosophy* 23: 391–434.
- and Zoltán Gendler Szabó (2000). “On Quantifier Domain Restriction”, *Mind and Language* 15: 219–61.
- von Stechow, Arnim (2002). “Binding by Verbs: Tense, Person and Mood under Attitudes”, in Makoto Kadowaki and Shigeto Kawahara (eds.), *Proceedings of NELS 33* (Amherst, Mass. GLSA), 379–403.
- Stephenson, Tamina (2007). “A Parallel Account of Epistemic Modals and Predicates of Personal Taste”, *Proceedings of Sinn und Bedeutung* 11: 583–97.
- Weatherson, Brian (2009). “Conditionals and Indexical Relativism”, *Synthese* 166: 333–57.
- Wright, Crispin (2001). “On Being in a Quandary”, *Mind* 110: 45–98.