

Predicates of Personal Taste, Semantic Incompleteness, and Necessitarianism

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Abstract

According to indexical contextualism, the perspectival element of taste predicates and epistemic modals is part of the content expressed. According to nonindexicalism, the perspectival element (a standard of taste, an epistemic situation) must be conceived as a parameter in the circumstance of evaluation, which engenders “thin” or perspective-neutral semantic contents. Echoing Evans (1985), thin contents have frequently been criticized. It is doubtful whether such coarse-grained quasi-propositions can do any meaningful work as objects of propositional attitudes.

In this paper, I assess recent responses by Recanati, Kölbel, Lasersohn and MacFarlane to the “incompleteness worry”. None of them manages to convince. Particular attention is devoted to MacFarlane’s (2014) argument, which states that if perspectives must be part of the content, so must worlds, which would make intuitively contingent propositions necessary. I demonstrate that this attempt to defend thin content views such as nonindexical contextualism and relativism conflates two distinct notions of necessity, and that radical indexicalist accounts of semantics, such as Schaffer’s necessitarianism, are in fact quite plausible.

1. Introduction¹

The mainstream view of propositions is that they are the semantic values of declarative sentences, the objects of propositional attitudes and illocutionary

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acts, and the bearers of truth values.² In order to fulfil these roles, propositions must be *minimally specific*. That is to say, there are certain types of information that propositions must contain in order to serve as the content of belief or assertion, or to be evaluated with respect to truth and falsity. Debates regarding how much information is required arise across different domains. The *locus classicus* is time: Following Frege (1979), *eternalists* contend that all propositions must contain temporal information and must thus be *time-specific*. Temporalists, by contrast, hold that at least some propositions are *time-neutral*.³ The last few decades have witnessed a broad variety of related disputes: whether meteorological propositions must be *location-specific*,⁴ whether propositions regarding epistemic modality require an *epistemic perspective*⁵ or whether the content expressed by claims of personal taste must contain a *standard of taste*.⁶ Advocates of a *thin content* view (concerning a particular domain) think that the relevant type of proposition can be *neutral* with respect to a particular feature *F*. Advocates of a *rich content* view (with respect to a particular domain) contend that the relevant type of proposition must always be *F-specific*.

Our point of departure is the question whether the contents of claims of personal taste are neutral with respect to standards of tastes (or “judges” or “perspectives”). Nonindexical contextualists answer this question in the affirmative: In subjective discourse, perspective-neutral contents, they hold, are required to account for the phenomenon of faultless disagreement, which, according to nonindexicalists, requires a cogent explanation (section 2). There are several ways to understand the argument from faultless disagreement (section 3). On a rich view of content, *what is said* includes both the lekton (Kaplanian content) and the circumstance of evaluation (what Recanati calls “Austinian propositions”). However, invoking rich contents, it is argued, makes it impossible to account for faultless disagreement. Alternatively, one might

² Stalnaker (1970) is amongst the first to state this view as the orthodoxy; for a detailed defense against recent alternatives, see Cappelen & Hawthorne (2009).

³ Eternalists include Stalnaker (1970), Wettstein (1979), Richard (1981, 1982), Salmon (1986), Stanley (1997a, 1997b), Fitch (1998). Temporalists include Kaplan (1989), Aronszajn (1996), Ludlow (2001), Recanati (2004), Brogaard (2012).

⁴ See inter alia Perry (1986), Carston (1988), Crimmins (1992), Taylor (2001), Recanati (2002, 2007), Borg (2005), Cappelen and Lepore (2007), Sennet (2011).

⁵ See for instance Egan et al. (2005), Kölbel (2009), Von Fintel and Gillies (2008, 2011), Schaffer (2011), MacFarlane (2011, 2014), Dowell (2011), Yanovich (2013), Marushak (2018), Marushak & Shaw (in prep.), Roberts (in prep.). For empirical work on the question, see Knobe & Yalcin (2014), Kneer (2015, in prep. b), Khoo (2015), Beddor & Egan (2018).

⁶ See inter alia Wright (2001), Kölbel (2004a, 2004b, 2009), Lasersohn (2005, 2008, 2011, 2016), Stojanovic (2007, 2012), Recanati (2007), Glanzberg (2007), López de Sa (2007), Cappelen and Hawthorne (2009), Saebo (2009) MacFarlane (2009, 2014), Egan (2010), Schaffer (2011), Collins (2013), Ferrari & Zeman (2014), Kompa (2015), Kneer (2015), Dinges (2017), Zakkou (2017, 2019).

suggest that the contents of propositional attitudes are exhausted by taste-neutral contents, and that disagreement must be conceived in terms of incompatible lekta. Views of this sort run into the *incompleteness worry* – the concern that contents thus conceived are too coarse-grained to fulfil their roles as the objects of propositional attitudes and illocutionary acts (section 4). MacFarlane (2014), however, has suggested that the worry overgenerates: If standards of taste must feature in the content, and if we assume that they do not differ importantly from worlds, the latter, presumably, must also be part of the content. Problematically, this would render a wide range of propositions necessary which we standardly consider contingent. A thin content view might thus be preferable.

After a detailed breakdown of MacFarlane’s argument from modal anxiety (section 5), I propose several reasons why its conclusion should be resisted: *First*, the argument conflates deep necessity (a modal property of sentences and contents) and superficial necessity (a property of modal sentences and contents, section 6). In virtue of specifying a world in the content, propositions turn out superficially necessary. But this is unproblematic, as they remain contingent in the intuitive, that is, the deep, sense: World-specific propositions do not purport to represent a particular aspect of *all* possible worlds as uniformly true or false across all worlds. They merely turn out true (or false) as assessed from all possible worlds, since they concern but a single, determinate, world (section 6.3). The *second* argument draws on recent work by Schaffer (2012, 2018). Schaffer argues that the entire case for eternalism (the view that all propositions must be time-specific) can be mimicked by necessitarians (advocates of the view that all propositions must be world-specific). Given such parallelism, and given that eternalism constitutes the orthodoxy as regards temporal features of propositions, it is not clear why necessitarianism must be avoided at all costs. But if it isn’t, then MacFarlane’s argument from modal anxiety is either incomplete – it must establish wherein the problem with necessitarianism actually lies – or else toothless (section 7). *Third*, independent considerations in favour of taste-neutral contents proposed by Kölbel (2009) and Lasersohn (2008) fail to convince; more general arguments such as Recanati’s Argument from Innocence (2007) do not carry over to the domain of personal taste (section 8).

If the considerations proposed in the paper are on the right track, we part with a number of interdependent lessons: Bringing to bear Evans’ distinction between superficial and deep necessity on the topic further strengthens Schaffer’s case in favour of necessitarianism, and it shows why MacFarlane’s response to the incompleteness worry might not convince. But if the incompleteness worry remains intact, then the thin content view with respect

to taste claims is implausible. Since a commitment to thin contents constitutes the *only* way to coherently formulate an argument from substantive faultless disagreement, the threat the latter poses to indexicalist semantics with respect to predicates of personal taste is limited at best.

2. Subjective Discourse

2.1 *Perspectival Claims*

A central debate in philosophy of language and linguistics concerns *perspectival* expressions and claims, i.e. expressions and claims whose extension depends on a contextually salient perspective. Examples include predicates of personal taste (“delicious”, “fun”), aesthetic predicates (“beautiful”) and epistemic modals (“might”, “must”, “possibly”).⁷ The orthodox approach to perspectival claims in truth-conditional semantics is indexical contextualism. According to this view, the relevant perspective is determined by the context of utterance, and it manifests itself at the level of the content expressed by the utterance. On this approach, a claim of personal taste such as (1) is standardly⁸ taken to mean (2):

- (1) Spinach is delicious.
- (2) Spinach is delicious for me.

This intuitively plausible picture has recently been challenged (successfully or not) on the basis of two widely-discussed arguments: The argument from faultless disagreement,⁹ and the argument from required retraction.¹⁰ The former has been used to motivate a position called nonindexical contextualism, the latter is intended to motivate truth relativism. In this article, we will principally focus on matters related to the argument from faultless disagreement.

⁷ I will use “perspectives” as a general way to refer to perspectival features such as epistemic perspectives, standards of taste etc.

⁸ In certain contexts the standard of taste invoked might be that of a person distinct from the speaker (which Lasersohn (2005, p.671) calls an exocentric reading), that of a particular group, or people in general (i.e. a generic reading). To facilitate discussion, we will focus principally on what Lasersohn calls the autocentric readings of perspectival claims – readings that invoke the speaker’s own standard of taste – which stand at the centre of the debate.

⁹ As regards the argument from faultless disagreement, cf. inter alia Kölbel (2004a, 2004b, 2009) and Lasersohn (2005, 2009). For responses sympathetic to contextualism, cf. Glanzberg (2007), Stojanovic (2007), Schaffer (2011), Sundell (2011) and Cappelen and Hawthorne (2009)

¹⁰ Cf. in particular MacFarlane (2007, 2014). For discussion focusing also on epistemic modals, see Egan et al. (2005), Egan (2007), von Fintel & Gillies (2008), Schaffer (2011), Dowell (2011), Yanovich (2013), Kneer (2015), and Lasersohn (2018).

2.2 *The Argument from Faultless Disagreement*

Consider the following exchange, in which Mary and Frank are having a dispute about the culinary merits of spinach.

(3) Mary: Spinach is delicious.

(4) Frank: No, spinach is not delicious.

Mary and Frank seem to disagree. In the literature, it is commonplace to assume that two individuals disagree with respect to a particular issue if the contents of their beliefs p and q (expressed by their utterances or not) are doxastically noncotenable,¹¹ and this appears to be the case. Curiously, however, neither of the speakers seems to be at fault, in so far as neither needs to revise their beliefs or retract their assertion. If the possibility of such faultless disagreement is an important characteristic of disputes about taste, indexicalist contextualism comes under pressure (or so the argument goes). The indexicalist can account for faultlessness, since both Mary and Frank express a speaker-relative content. Disagreement, however, is lost, as becomes apparent once the perspectives that tacitly feature in the asserted contents are made explicit.

The possibility of faultless disagreement in subjective discourse motivates nonindexical contextualism. On this view, the content expressed by utterances invoking predicates of personal taste does not contain a tacit standard of taste. The perspectival element, which is also drawn from the context of utterance, instead features as a parameter in the circumstance of evaluation. Since the perspective-neutral content of an utterance of "Spinach is delicious" and the content of "Spinach is not delicious" stand in direct contradiction, disagreement is accounted for. Faultlessness is explained by the different truth-values of the two claims. "Spinach is delicious" is true with respect to Mary's perspective, yet false with respect to Frank's, and vice versa for its negation. Hence, neither Frank nor Mary need to revise their beliefs or retract their assertions.

2.3 *The Unconvinced and the Nonplussed*

Plausible as the nonindexicalist solution might appear at first blush, many scholars remain unconvinced. Moltmann (2010), for instance, writes:

¹¹ This has become the standard way to interpret definitions of disagreement by nonindexicalists such as Kölbel (2004, p. 53-4) and Lasersohn (2005, p. 647). For discussion cf. e.g. Stojanovic (2007, 2017) and MacFarlane (2014, Ch. 6.3 and 6.7).

The most important problem for the [nonindexicalist contextualist] account is that it does not really explain faultless disagreement. Competent speakers [...] will know that they mean the utterance of such a sentence to be true relative to their own context. The problem then is, why on the [nonindexicalist] account can there be disagreement among two speakers when the speakers know that the content of their utterance can be both true, though relative to different contexts? If the truth conditions of the sentence are clearly different relative to the two speakers, then this should correspond to a difference in subject matter, rather than to a single content about which there could be disagreement." (p. 194)

Others, such as Stojanovic, question whether faultless disagreement amounts to a genuine puzzle of any consequence for the linguistic analysis of subjective discourse:

[On the assumption of semantic competence,¹² both speakers] know that one and the same content may take different truth values when evaluated at different judges [i.e. standards of taste]. They also know that the one's assertion and the other's denial of the same content are inconsistent only when evaluated with respect to the same judge. Hence if each party intends the asserted content to be evaluated at himself or herself, and if this is mutually clear between them, then they will realize that there is no clash in truth value between their claims (when evaluated as they intend them to be), and that their "disagreement" is thus nothing more than a divergence in preferences. (2007, p. 697)

The diverging reactions of those who feel the pull of the argument from faultless disagreement and those who do not, I would like to suggest, is driven by an undertheorized difference in conceptions of content. To explore the matter, it is helpful to follow Recanati (2007) in differentiating the truth-conditionally complete content of an utterance as distributed over two aspects: the lekton (or, roughly, Kaplanian content) and the circumstance of evaluation. The approach is neatly captured by two principles:

¹² Both Stojanovic and Moltmann explicitly invoke semantic competence with respect to the predicates at stake. Stojanovic defines it thus: "Speakers of English are semantically competent with predicates of taste: they master their meaning and truth conditions." (2007, p. 696).

Duality: To get a truth-value, we need a circumstance of evaluation as well as a content to evaluate. (As Austin puts it, “It takes two to make a truth”.)¹³

Distribution: The determinants of truth-value distribute over the two basic components truth-evaluation involves: content and circumstance. That is, a determinant of truth-value, e.g. a time, is *either* given as an ingredient of content or as an aspect of the circumstance of evaluation. (2007, pp. 33-34)

Recanati’s framework provides us with two notions of content: The truth-conditionally complete Austinian proposition, distributed over lekton and circumstance, as well as the explicit content or lekton itself. Once we have multiple conceptions of content, our above invoked definition of disagreement turns out ambiguous – the doxastic noncotenability of *contents* could be interpreted either as a noncotenability of Austinian propositions or of lekta:

Disagreement_{AP}: Two individuals A and B disagree if the truth of some Austinian Proposition believed or uttered by A precludes the truth of some Austinian Proposition believed or uttered by B.

Disagreement_L: Two individuals A and B disagree if a lekton believed or uttered by A and a lekton believed or uttered by B cannot both be true with respect to any single circumstance of evaluation.

What notion of agreement is at play in the above quoted passages? Both Moltmann and Stojanovic hold that competent speakers, in using taste-predicates autocentrically, will evaluate them with respect to their own perspectives, determined by their respective contexts of utterance. The speakers, that is to say, keep track not only of those aspects of content represented in the lekton, but also of those that – like the standard of taste on a nonindexicalist distribution – are part of the circumstances of evaluation. Genuine disagreement, this position assumes, must arise with respect to incompatible Austinian propositions, not with respect to lekta. And both Moltmann and Stojanovic are correct that faultless disagreement cannot arise on such premises.

Take our sample dialogue consisting of (3) and (4), and let’s suppose that both interlocutors intend “delicious” to be interpreted autocentrically. If the circumstances of evaluation include a world *w*, a time *t*, and a perspective *p*,

¹³ Austin (1971).

then, on a nonindexicalist view, the Austinian propositions (in square brackets) uttered by Mary and Frank are:

(5) Mary: [Spinach is delicious. (w, t, Mary)]

(6) Frank: [Spinach is not delicious. (w, t, Frank)]

Semantically competent speakers, who correctly grasp the Austinian propositions at stake, will notice that there is no substantive disagreement (or, as Moltmann puts it, that there is a “difference in subject matter” across the propositions uttered). If, by contrast, Frank evaluates the content explicitly expressed by Mary’s utterance with respect to *his* perspective, he fails to grasp the Austinian proposition she in fact expressed and falls prey to a misunderstanding. In such a case, there might seem to be disagreement, though even if there were, it would certainly not be faultless.

The fact that a moderate version of nonindexical contextualism, according to which disagreement must be spelled out in terms of Austinian propositions, cannot accommodate faultless disagreement should not be surprising, as the position is truth-conditionally equivalent to indexical contextualism.¹⁴ Scholars impressed by the phenomenon of faultless disagreement, this suggests, are committed to a notion of disagreement in terms of lekta – and lekta *only*, that is, disagreement in terms of lekta independently of the circumstance of evaluation. More generally, they are committed to the view that the objects of belief, assertion and disagreement are thin contents – contents that can be neutral with respect to standards of taste, and perhaps also with respect to e.g. time and certain other parameters.

The resulting view of content is radical in nature.¹⁵ Evans famously scoffed at the idea that a time-neutral sentence such as “Socrates is sitting” can “express

¹⁴ Stojanovic (2007) provides a logical proof, which demonstrates that indexicalism and moderate nonindexicalism are truth-conditionally equivalent. But by aid of Recanati’s framework, the point can be made at an intuitive level: It doesn’t matter whether the standard of taste features in the lekton or the circumstance of evaluation as long as the resulting Austinian proposition, distributed over both aspects of content, remains the same.

Recanati, a moderate nonindexicalist, is explicit that such a view “by itself, does not give a solution to the problem to the problem of faultless disagreement, contrary to what Kölbel and Lasersohn believe.” (2007, p.91). On such an account, “alleged” faultless disagreement might “arguably” arise (2007, p.94), because both interlocutors invoke a generic taste parameter referring to the community’s standards, and they might disagree about what those standards should be. This would of course reduce instances of faultless disagreement to very few. Furthermore, it is not evident, as Recanati points out, whether the proposal generalizes to other domains such as epistemic modals.

¹⁵ I follow Recanati (2007, Ch.2) in distinguishing “moderate” nonindexical contextualism from “radical” nonindexical contextualism. Recanati himself calls nonindexical contextualism

a complete meaning” and considered it “such a strange position that it is difficult to believe that anyone has ever held it” (1985).¹⁶ To quickly illustrate the ramifications of the thin content approach (we will return to it at length in section 4), let us stick with time: Mary, at 6 am, says “Su is in bed [at home]” and Frank, at noon, says “Su is not in bed”. Though the lekta, by themselves, appear (at least in some sense) contradictory, it is hard to fathom in what ways this exchange manifests disagreement in any ordinary sense of the term, and hence why one would want to endorse a thin content view.¹⁷

2.4 *Thin Content and Truth Relativism*

Scholars who do not feel the force of the puzzle of faultless disagreement sometimes extend their critique from nonindexical contextualist positions such as Kölbel’s and Lasersohn’s to assessment-relative views like MacFarlane’s.¹⁸ In an article taking stock of the controversy relating to faultless disagreement, Stojanovic (2017), for instance, writes:

While there are genuine formal differences between the simpler [nonindexicalist] framework and MacFarlane’s, that does not make the latter better suited to account for the puzzle [of faultless disagreement]. For assume Kathy and Rob to be competent speakers; they must be aware, then, that their claims can only be evaluated for truth with respect to a context of assessment. If Kathy intends her claim to be evaluated with respect to her own context of assessment, and Rob intends his denial of Kathy’s claim to be evaluated with respect to his own context, and if this is mutually clear between them, then we have hardly made any progress towards an explanation of their presumed disagreement. (2017, pp. 10-11)

“relativism”. I reserve the latter term for MacFarlane’s position, as has become commonplace in the literature.

¹⁶ Does anyone actually propose such a picture as regards taste-neutral sentences? I think there is clear evidence that a view like this is advocated by authors such as Kölbel (2004b), Richard (2004, 2008, 2011) and Lasersohn (2005, 2009) to name but a few.

¹⁷ Perhaps nonindexicalists could argue that time-neutral contents behave in important respects differently from taste-neutral contents – respects that explain why it might strike us as intuitively implausible in the former, but not in the latter case, to attribute disagreement. However, in justifying parameter proliferation, much of the efforts of nonindexicalists have focused on emphasizing the similarity between the “new parameters” (standard of taste, epistemic perspective etc.) and more traditional ones such as worlds and times (see e.g. Kölbel, 2009).

¹⁸ Note that MacFarlane himself is sceptical of the notion of faultless disagreement (2014, pp. 133-136).

This might be a little too quick. Just as nonindexical contextualists, truth relativists such as MacFarlane argue that the extension of taste claims depends, *inter alia*, on a taste parameter to which the taste predicate must be relativized. However, the taste parameter is not determined by the context of utterance, but by the context of assessment. There are infinitely many contexts of assessment, so the interpretation of a taste claim is not tied to a single, determinate context of utterance as on the contextualist view. Let's assume, with MacFarlane, that the expression "delicious" is indeed assessment-sensitive. Then semantic competence with the predicate would entail that speakers are aware that the extension of a tokened taste claim can change from context of utterance to context of assessment. If Frank, in our sample dialogue, evaluates Mary's utterance with respect to a circumstance determined by *his* context of assessment, he would thus be beyond reproach. Once we take assessment-sensitivity seriously, it is of no help to insist, as Stojanovic does, that Mary *must intend* her claim to be evaluated with respect to *her* context (that is, her context of utterance), since this presupposes a single, privileged context – precisely the feature the relativist does away with.

Here's an alternative way to make the point: In order to introduce his view, MacFarlane (2014, pp. 62-64) discusses the example of a fictitious expression "noy", which functions similarly to the ordinary language indexical "now". The difference between the two is that the extension of claims invoking "now" depends on a time fixed by the context of utterance, whereas the extension of "noy" claims depends on a time initialized by the context of assessment. If Mary says "It's raining noy" at t_1 (when it is raining) and Frank assesses her utterance as false at t_2 , when it is no longer raining, it is not appropriate for Mary to complain that she *intended* her claim to be relative to the context of utterance. What a complaint of this sort reveals is simply that Mary does not have the stipulated semantic competence, since she fails to grasp that the expression "noy" is assessment-sensitive.

3. Accounting for Disagreement

Moderate nonindexical contextualism conceives of the objects of disagreement as truth-conditionally complete contents, distributed over lekton and circumstance. Hence, two individuals A and B disagree iff the truth of some Austinian Proposition believed or asserted by A precludes the truth of some Austinian Proposition believed or asserted by B. Naturally, if the proposition that spinach is delicious is true relative to Mary's standard of taste, but false with respect to Frank's, the interlocutors talk past each other: The value of the perspective parameter is a constituent of the Austinian proposition, hence two

different propositions are at stake, or as John Perry (1986) would have it, the two propositions *concern* different standards of taste.¹⁹

Given contextualist premises (i.e. utterance-sensitivity), the sceptical reactions *vis-à-vis* the argument from faultless disagreement discussed above are on the right track. Paired with a substantive notion of content, faultless disagreement can simply not arise – no matter whether the distribution accords with nonindexicalist or indexicalist proposals. This leaves three options to get the puzzle off the ground:

(1) *Truth relativism* gives up utterance-sensitivity in favour of assessment-sensitivity, and can, at least in principle, retain a reasonably rich view of content.

(2) *Moderate nonindexical contextualists* acknowledge that they do not have the resources to account for faultless disagreement in terms of *Disagreement_{AP}* as demonstrated above. However, they might argue, in contrast to indexicalists, they can account for the *appearance* of faultless disagreement, and that this is, at root, the phenomenon to be explained.

(3) *Radical nonindexical contextualism* refuses to retreat to appearances yet holds fast to utterance-sensitivity. In order to make room for disagreement, one must thus assume that two individuals can disagree in terms of taste-neutral lekta, invoking the definition of *Disagreement_L* from above.

In this paper, the focus lies on the third option, and the more general plausibility of thin content views, which have received comparatively little attention. But before we get started, I'll briefly state why I consider it apt to set the first two options aside.

3.1 Truth Relativism

Relativism about truth in English, as regards predicates of personal taste, holds that the ordinary English meaning of expressions such as "tasty", "delicious"

¹⁹ A proposition, Perry suggests, is about some feature F, if F is one of its propositional constituents (articulated or not). For instance, according to eternalists like Frege and Evans, propositions or "thoughts" always include a temporal specification, even if only tacitly so, and are thus always about particular times. Alternatively, a proposition can be said to concern a feature F, if its truth value depends on how things stand as regards F. That's how a temporalist understands tensed propositions: Their content is standardly time-neutral, but they concern a particular time. If Mary utters the time-neutral sentence "Socrates is sitting" at midday, it concerns that specific time since its truth must be evaluated with respect to the world and the time determined by the context of utterance.

or “fun” are *in fact* assessment-sensitive. This is an empirical claim (MacFarlane, 2014, p. 65). If this empirical claim were true, the relativist would, as explained in the previous section, have the conceptual resources to account for faultless disagreement. In this paper, I will not engage in detail with this view for two reasons. First, I doubt its empirical adequacy. Findings from experimental linguistics suggest that ordinary language speakers evaluate the extension of taste claims (Kneer, 2015 Ch.7, in prep. a) and epistemic modals (Knobe and Yalcin 2014, Marques ms, Kneer, 2015 Ch. 6, in prep. b) with respect to the context of utterance, not the context of assessment.²⁰ Second, whereas faultless disagreement constitutes *the* central motivation for nonindexical contextualism, MacFarlane is explicit that the phenomenon “is not needed for motivating or explaining truth relativism” (2014: 136, cf. also Chapter 6 more generally).

3.2 The Appearance of Faultless Disagreement

Moderate nonindexicalists potentially have an advantage over indexicalism, arising from their favoured distribution whereby standards of taste are anchored in the circumstance. Even though they might be incapable of accounting for faultless disagreement if disagreement is understood in terms of Austinian propositions, their options are not exhausted by the radical alternative notion of *lekta* disagreement. In contrast to the indexicalist, nonindexicalists have a story to tell as regards the *appearance* of faultless disagreement: there is genuine faultlessness as witnessed at the level of Austinian propositions, while apparent *denial* (“No! Liquorice is not tasty.”) or *rejection* (“That’s wrong! Liquorice is not tasty.”), and hence at least apparent disagreement, is accounted for at the level of *lekta*. The fact that the *lekta* are conceived as perspective-neutral ensures that they, at least as long as the circumstances of evaluation are disregarded, contradict one another. The indexicalist, by contrast, cannot capitalize on this neat division of labour. Once standards of taste are part of the content, and relativized to distinct speakers, it is mysterious how, and why, the appearance of disagreement might arise in the first place.

In a recent paper, Stojanovic (2017) surveys strategies to account for appearances of faultless disagreement that do not require a nonindexicalist framework. Plenty of options are available, drawing on *contextual*

²⁰ Whether or not it is empirically adequate, the assessment-sensitive framework remains, of course, philosophically coherent. But if the meaning of perspectival expressions is in fact not assessment-sensitive, as the data suggests, then its interest is limited, as it will be devoid of application.

underdetermination, metasemantic and metalinguistic observations, presuppositions and disagreement in attitude.

Stojanovic (2007) herself argues that, often times, contextual underdetermination obscures whether the speaker intends their taste claim to be understood autocentrically or generically.²¹ In the former case it would constitute a subjective claim (thus warranting faultlessness), in the latter it would constitute a garden-variety factual claim about the community's standard of taste, warranting genuine disagreement, though not faultlessness. Appearances of faultless disagreement can arise when it is opaque what, in fact, the propositions uttered are. Such appearances vanish once the propositions are further elucidated ("Well, liquorice is tasty for *me*."). Another strategy draws on the observation that predicates of personal taste are gradable adjectives (Glanzberg, 2007), and that the interpretation of taste claims thus involves tacit scales and thresholds.²² Even if both speakers envision a joint standard of taste, they might operate with divergent scales and thresholds. But if they do (thus warranting faultlessness), the appearance of disagreement might arise nonetheless: subjective discourse frequently triggers a "presupposition of commonality", i.e. a presupposition held by all parties involved that they share a common perspective as to what is tasty, funny or beautiful (López de Sa, 2008, 2015, cf. also Marques & Garcia-Carpintero, 2014).

Sundell (2013) argues that disputes about personal taste, just like disputes about morality (Plunkett & Sundell, 2013) or aesthetics (Sundell 2017), are frequently characterised not by disagreement in descriptive content, but by *metalinguistic disagreement*. As with non-evaluative gradable adjectives (see Barker, 2002), situations can arise where the interlocutors disagree less about whether an object instantiates a particular property, but what the context-dependent *standards* for such property ascriptions *are* or *should be*. The appearance of disagreement with respect to property instantiation feeds on genuine metalinguistic disagreement regarding the scales and thresholds that govern (or should govern) the application of predicates like "delicious", "beautiful" or "wrong" at the determinate context (for detailed discussion, see Kneer, 2015 Ch.4).

²¹ See also Moltmann (2010) and Pearson (2012).

²² "Tasty" and "fun", as Glanzberg observes, are more complex than off-the-shelf gradable adjectives such as "rich" or "tall", in so far as they can draw on more than a single scale. However, he argues, "this is not a feature specific to adjectives of personal taste. Many gradable adjectives can be associated with multiple scales. For instance, someone can be smart as in 'book smart' or 'street smart', a large city can be large in population, geography, etc." (2007: 10).

Finally, certain philosophers trace the appearance of faultless disagreement not to disagreement in acceptances, but in *attitude* (Huvenes, 2012; Marques, 2014, 2015). The fixation on the semantics of taste claims, on this approach, is somewhat beyond the point. If I say “I like spinach”, and you respond with “I dislike it”, we have a clash in attitudes, a clash which might frustrate joint dinner plans, and which might thus constitute disagreement in *some* sense. Overall, it is evident that indexicalists have a broad set of options to explain why the appearance of faultless disagreement in subjective discourse might arise.

3.3 Taking Stock

In section 2, we saw that moderate nonindexical contextualism does not have the resources to account for faultless disagreement in a *substantive* sense. Tellingly, major advocates of moderate nonindexical contextualism, including Kölbel (2009), have retreated to talk about the mere *appearance* of faultless disagreement, and argued that indexical contextualists cannot make sense of them.²³ As discussed, however, the options of indexicalists to account for the latter are plentiful. All this said, a question arises as to how much mileage one can get out of debates about *appearances*.²⁴ It would be somewhat excessive to propose far-reaching revisions to truth-conditional semantics on the grounds that claims of personal taste, under certain circumstances, generate an impression (and an impression only) of faultless disagreement. Nonindexicalists might consequently be well advised to opt for a bolder move: they could cast disagreement in terms of *lekta* and thus hold fast to a notion of faultless disagreement that goes beyond appearances only.

According to radical nonindexical contextualism, thin contents or *lekta* can constitute the objects of propositional attitudes or illocutionary acts. The view is radical because disagreement can arise between two speakers asserting contradictory taste-neutral *lekta*, *in complete disregard* of the circumstances of evaluation determined by the relevant contexts of tokening. In Perry’s terms: The taste-neutral contents *p* and *q* asserted or believed by two individuals can constitute disagreement even though they *concern* distinct perspectives. This

²³ Examining situations of apparent disagreement over taste (such as (3) and (4) above), Kölbel writes that linguistic evidence of this sort “is not meant to consist in the purported fact that these cases do indeed involve both faultlessness and disagreement in some pre-theoretical sense. Rather the evidence at best consists in the fact that there appears to be faultless disagreement.” (2009, p.389).

²⁴ Beillard (2010), who devotes an entire article to this phenomenon contends that “the appearance [of faultless disagreement] is possible only under conditions that disqualify it as evidence: gross ignorance or irrationality, or else a prior commitment to an especially crude and implausible form of relativism.” (2010, p. 603).

approach, which is not restricted to standards of taste but can extend to other features that are candidates for parameters in the circumstance of evaluation, is largely undertheorized. In the following, we will examine an argument against it – the incompleteness worry – and a recent response to the latter proposed by MacFarlane (2014).

4. The Incompleteness Worry and MacFarlane's Response

4.1 *The Incompleteness Worry*

Given that a moderate version of nonindexical contextualism can at best account for faultless misunderstanding, and given that an argument from the *appearance* of faultless disagreement has little bite, the radical strategy might hold most promise for advocates of nonindexicalist contextualism. However, the thin content picture this strategy invokes is contentious. The worry is this: If disagreement consists in incompatible *lekta*, and if we assume the objects of assertion, belief and disagreement to be the same kinds of entity, then doubts arise whether propositions or contents so conceived might not rather be too limited to fulfil their role in propositional attitudes and illocutionary acts. Differently put, given the outsourcing of relevant aspects of the full truth-conditional meaning from the content into the circumstance, one might wonder whether the impoverished explicit content, the *lekton* by itself, is still sufficiently fine-grained to explain our attitudes and the actions they drive. If, for instance, all we know is that Sam thinks it's raining yet are in the dark as regards the location at stake, it is reasonable to think that we are in no position to know what he believes, to predict how he will act, or to explain why he acts as he does. Similarly, if we don't know with regards to which standard of taste to evaluate Mary's assertion that spinach is delicious, we cannot say what *she* believes vis-à-vis the culinary features of spinach, or with regards to *whose* tastes we must understand and evaluate her utterance. What to prepare for dinner? Cappelen & Hawthorne, for instance, write:

There is something of a strain in accepting that each such thin semantic value cuts the space of possibility into the worlds where it is true and the worlds where it is not, grounded in felt uneasiness at answering very simple questions about what it would take for a thin semantic value to be true. (For example, would *Jill is ready* be true at a world where she was ready to play golf, but not ready to get married? [...]) It is immensely tempting to deny that these kinds of objects reach the level of propositionality. (2009)

MacFarlane summarizes the worry thus:

One might try to cash out an “incompleteness” worry in the following way. Propositions are supposed to be the contents of beliefs and other propositional attitudes. But if we specify the content of someone’s belief in a way that does not settle what is relevant to the accuracy of the belief, we have not given its complete content. [...] A location-neutral, time-neutral, or taste-neutral content would only incompletely determine the conditions for an attitude to be accurate, and so could not be the complete content of the attitude. (2014, p. 86)²⁵

4.2 The Argument from Modal Anxiety

According to MacFarlane, the worry overgenerates. Since his, to my knowledge, is the only serious attempt to address the problem incompleteness poses for radical nonindexical contextualism directly,²⁶ I will recite his argument in full, which picks up from the passage just quoted:

[The above] line of thought proves too much. For surely the accuracy of *any* contingent belief depends on features of the world in which the believer is situated – the world of the context of use. Even if we specify the content of Sam’s belief in a way that builds in time and place – *that it is 0° C at the base of the Eiffel Tower at noon local time on February 22, 2005* – it is still not determined whether the accuracy of his belief depends on the temperature in Paris in world w_1 or on the temperature in Paris in world w_2 . To know that, we would have to know not just what Sam believes – the content of his belief – but in what context, and in particular in what world, the belief occurs.

One might respond to these considerations by bringing the world of the context of use into the *content* of Sam’s thought, so that what he thinks is that it is 0° C at the base of the Eiffel Tower at noon local time on February 22, 2005, in *this* world (Schaffer 2012). [...]

[However], bringing the world of the context into the content of Sam’s thought would make this content a necessary truth about this possible

²⁵ Another debate fuelled by concerns of incompleteness is the one surrounding “unarticulated constituents” e.g. in weather reports. The debate differs from the PPT debate in many regards and I will set it aside in this paper.

²⁶ At the risk of repetition: Although MacFarlane is one of the few authors who engages with the incompleteness worry, I do not think that the latter constitutes a challenge for his view, that is, relativism (see section 2.4).

world, rather than a contingent truth about the weather in Paris. We should not say, then, that Sam's thought is *about* the world of the context of use. It is not *about* any particular world. (2014, pp. 86-87)

Assume with MacFarlane that relativity as regards the world parameter is *not* special in any way, i.e. it has exactly the same general features as more exotic parameters such as perspectives, locations or standards of precision.²⁷ We should pay no heed to the incompleteness worry, the suggestion is, for doing so gives rise to considerable complications pertaining to modal logic: As soon as we build the world into the content – for instance by aid of a hidden actuality operator or a tacit demonstrative reference to the actual world – a true contingent claim becomes a necessary truth. We will call this argument the argument from modal anxiety.

Note the limited scope of the argument: It does nothing to *explain* how thin propositions could fulfil their role as objects of belief and assertion. As such it cannot dispel the incompleteness worry. Instead, the argument presents a dilemma for those impressed by faultless disagreement: Either bite the bullet as regards incomplete propositions or run into trouble with regards to modal logic. But it is not obvious that incomplete propositions are the lesser evil. Facing such a trade-off, we might much rather want to sacrifice the resources to account for faultless disagreement instead. In contrast to modal complications and semantic incompleteness, the latter is a comparatively unimportant phenomenon, if it rises above appearances at all. Hence, what is presented as an argument *against* perspective-specific contents, is perhaps best understood as an argument *in favour of moderate nonindexical contextualism*. On this view, perspectives, times, worlds etc. are all safely outsourced into the circumstance: There, they cannot wreak modal havoc, yet the objects of belief and assertion – if conceived as Austinian propositions – are complete because they consist of lekton and circumstance jointly.²⁸ Naturally, as argued by Stojanovic and Moltman, this view presumably cannot explain substantive faultless disagreement. While the force of the argument's conclusion is thus limited, I also have doubts about whether its premises are sound. To these doubts we turn next.

²⁷ As such we explicitly refrain from attempting to block the argument in ways familiar from Evans (1985). Evans argues that the world parameter is special because there is a unique default value – the actual world, whereas there is no such default value for time and other parameters. In a similar vein, Cappelen and Hawthorne (2009) emphasize that the actual world is "the only reality there is" (2009, p. 78) and propose a picture according to which world information is specified neither in the propositional content nor the circumstance of evaluation.

²⁸ Recanati (2007), who calls this position Strong Moderate Relativism, defends it convincingly against incompleteness and related worries.

5. The Argument Reconstructed

Let's look at the argument step by step.

(P1) If time- or location-neutral propositions expressed by utterances such as "It's raining" are semantically incomplete, so are world-neutral propositions like "Paris is the capital of France in 2014". Differently put: *The incompleteness worry concerns all parameters alike.*

(P2) If the objects of assertion and belief must be complete propositions, they must be world-specific propositions, or propositions *about* worlds in Perry's (1986) sense. Sentences expressing a complete proposition must make mention of a particular world either explicitly or implicitly. When no world is explicitly stipulated, a hidden world argument draws a salient value from the context of utterance. Standardly, the world provided by the context is the actual world, i.e. the world at which the sentence is uttered. For instance (ignoring time), "Paris is the capital of France" expresses the proposition "Paris is the capital of France [in this world]" or "[Actually], Paris is the capital of France", where the modal operator "actually" (in the following: *A*) sets the parameter for the world of evaluation to the world of utterance.²⁹ Hence: *Any tokened sentence S apparently expressing a world-neutral proposition P , in fact standardly expresses a modally complete proposition about the actual world, AP .*

(P3) A sentence which tacitly features the "actually" operator (or an instance of "in this world") expresses an *actualized proposition*. An actualized proposition, if true, is true necessarily. No matter at which world it is evaluated, it must always be assessed with regards to the world actual at the context of utterance. Let *N* stand for the modal operator "necessarily", such that: $AP \rightarrow NAP$.

(P4) Given (P2) and (P3): An assertion (or other tokening) of a sentence that expresses the proposition *P* in fact always expresses *AP*, which is equivalent to *NAP*. Hence, for any tokened sentence expressing *P*, $P \rightarrow NAP$.

(C) Since all asserted propositions must be world-specific on pain of incompleteness, those sentences which do not explicitly specify a world in the

²⁹ An intuitive grasp of the "actually" operator suffices for our purposes. For discussion of the operator's behaviour in propositional modal logic, cf. Crossley and Humberstone (1977), Gregory (2001) and Blackburn and Marx (2002). Gregory (2001, p. 61ff) is particularly pertinent for our premises P3 and P4. For "actually" in first-order modal logic based on S5 cf. Hodes (1984), for a more general first-order modal logic treatment see Stephanou (2005).

lekton must be conceived as carrying an implicit actuality operator (P1). Given (P4), all sentences, once tokened, express actualized propositions which are true necessarily if true at all, i.e. $P \rightarrow NAP$. As regards Sam's thought about the weather in Paris, MacFarlane concludes, the procedure of "bringing the world of the context into the content of Sam's thought would make this content a *necessary truth* about this possible world, rather than a *contingent truth* about the weather in Paris" (quoted above). This, the modal moral is supposed to be, is deeply counterintuitive.

6. Modal Anxiety and Two Types of Necessity

6.1 Modal Anxiety

What drives MacFarlane's argument from modal anxiety is, I suspect, an intuition characteristic of early reactions to Kripke's (1972) contingent *a priori* and necessary *a posteriori*. Statements of this sort arise as a consequence of rigid designation, a feature in virtue of which certain expressions such as proper names or natural kinds designate the same individuals in all possible worlds. As will be shown below, the privileged role the actual world plays in determining the extension of such expressions and the *prima facie* paradoxical statements it engenders, is exactly what is at work as regards the alleged necessity of contingent propositions when actualized. The point, however, can be made at an intuitive level. Suppose the content P of Sam's thought carries an implicit reference to the actual world, such that P is "It is 0° C at the base of the Eiffel Tower at noon local time on February 22, 2005 [at the actual world]." As MacFarlane highlights, P , *if true*, is true necessarily. But the necessity at stake need *not* clash with our intuition that the content of Sam's thought is as contingent as they come. Though actualized propositions are always necessary (that is, necessarily true or necessarily false), *whether* they are true or false in the first place depends on contingent features of the one particular world at which they are tokened. Differently put: Even if the content of Sam's thought happens to be true, and is thus true necessarily, it still holds good that if it had *not* been the case that it was 0° C at the base of the Eiffel Tower on February 22, 2005, the content of Sam's thought would have been false.

6.2 Two Types of Necessity and Contingency

The above considerations suggest that there are two different kinds of necessity (and, correspondingly, two types of contingency) – a proposal which is hardly new. Following Evans (1979), whose distinction is more fully

elaborated by Davies and Humberstone (1980), we'll label them "superficial necessity" and "deep necessity":

Necessity_S: A sentence or content p is superficially necessary iff p is true in all possible worlds.

Necessity_D: A sentence or content p is deeply necessary iff p is (actually) true no matter which possible world is actual.³⁰

The actualized and hence world-specific proposition entertained by Sam is superficially necessary yet deeply contingent. Though epistemic matters are of no particular concern as regards MacFarlane's example, it is helpful to discuss his response to the incompleteness worry in the context of the contingent *a priori*, and, in particular, the necessary *a posteriori*. By aid of the distinction between the two types of necessity, we can dispel modal anxiety in similar ways as Evans and his followers countered the widespread contention that Kripke cases "constitute an intolerable paradox" (Evans, 1979, p. 161).³¹

The content of Sam's thought is necessarily true in the superficial sense *if true*, yet the assessment whether it is true in the first place is a matter of empirical inquiry. Sam's thought can thus be seen as an instance of the necessary *a posteriori*,³² the perplexing epistemic status of which is frequently considered a direct consequence of the deep contingency which Sam's thought intuitively manifests. The case bears considerable likeness to classic examples of the necessary *a posteriori*, for instance "scientific identities" like "Water = H₂O". The similarity is even more obvious as regards (deeply) contingent propositions invoking an "actually" operator, i.e. propositions that constitute a "fund of simple examples of the necessary *a posteriori*" as Davies and Humberstone (1980, p. 10) point out. Given that grass is green in the actual world, "Grass is actually green" is true in all possible worlds and hence superficially necessary. Still, it could have been the case that grass was orange, hence "Grass is actually green" is not true no matter which world is considered actual – it is deeply contingent.

The same holds for scientific identity statements. If "Water = H₂O" is in fact true, it is true in all possible worlds, since expressions denoting natural kinds designate rigidly. However, the chemical composition of water can only be determined by means of empirical enquiry, it is known *a posteriori*. And it is a

³⁰ The formulations are borrowed, with slight modification, from Hanson (2006, p. 448).

³¹ Evans is principally concerned with the contingent *a priori*, but the strategy carries over to the necessary *a posteriori* (cf. Davies & Humberstone, 1980), which is our primary focus.

³² Not an unusual move, see Davies and Humberstone (1980) as well as (Davies 2004).

posteriori in virtue of its deep contingency. If it had been the case that water was XYZ, "Water = H₂O" would have been false. In fact, the expression "water" can be understood as involving a tacit reference to the actual world. Putnam, in certain moods, describes it as involving such an indexical element, and Davies and Humberstone suggest to conceive of "water" as a descriptive name (a name whose reference is fixed by description) featuring an implicit "actually" operator. On this proposal, "water" is short for "the actual watery stuff hereabouts" and we have effectively the same sort of case as the one MacFarlane is worried about.

What exactly are deep necessity and contingency, and how do they differ from superficial necessity and contingency? A sentence *S*, for Evans,³³ manifests *superficial* contingency, iff there is a world in which *S* is false, that is, if neither " $\Box S$ " nor " $\neg\Box S$ " are true (where the box symbolizes the necessity operator). Contingency in this sense is a property of a sentence which "depends upon how it embeds inside the scope of modal operators" (Evans 1979, p. 179). By contrast, deep contingency is introduced not with respect to a sentence's behaviour when embedded under standard modal operators, but with regards to "what makes it true": "If a deeply contingent statement is true, there will exist *some state of affairs* of which we can say both that had it not existed the statement would not have been true, and that it might not have existed" (Evans 1979, p. 185). Conversely, a statement is deeply necessary if it is true independently of which world turns out actual and hence cannot be falsified by contingent features of reality.

What is captured by superficial necessity is a *property of modal sentences* – sentences, that is, which invoke, tacitly or explicitly, some reference to some particular world. A sentence *S* and its actualized version *AS* can come apart in terms of superficial necessity, because necessity in this sense is responsive to the modal features of the sentence, in this case the "actually" operator. Deep necessity, on the other hand, captures not a *property of modal sentences*, but a *modal property of sentences*.³⁴ Necessity or contingency regarding a sentence *S* and its actualized version *AS* do not come apart, since necessity in this sense is *unresponsive* to the modal element in "*AS*". In the deep sense, *S* and *AS* are both contingent if dependent on which world happens to turn out actual, or else both necessary in so far as they hold no matter which world happens to turn out actual.

³³ Evans' analysis proceeds in terms of sentences, rather than propositions or contents. We will follow Kment (2017, p. 2) in making the common assumption that "[a] sentence is necessary (possible, contingent) just in case it expresses a necessary (possible, contingent) proposition."

³⁴ Cf. Davies and Humberstone (1980), as well as Davies (2004).

Tacitly world-specific contingent propositions such as “Grass is green [in this world]” or “Grass is [actually] green”, I suggested, raise as much of a paradox as necessary *a posteriori* statements do: None whatsoever. They are necessary in a *superficial* sense, that is, true at all possible worlds only in virtue of the modal element in the content. They are not necessary in a deep sense: had another world turned out actual, “Grass is [actually] green” would have been false. The truth of such world-specific propositions is thus just as dependent on features of contingent reality as the truth of their world-neutral equivalents. Consequently, the argument from modal anxiety is not a convincing response to the incompleteness worry. *Pace* MacFarlane, and in line with Davies, superficial necessity must be understood as a largely innocent feature of modal sentences. What matters is that actualized propositions, albeit superficially necessary, remain deeply contingent.

6.3 Worlds and Times

According to the argument from modal anxiety, all propositions, in virtue of their being world-specific, turn out necessary. This, MacFarlane argues, is unwelcome because they are *intuitively* contingent. However, it does seem reasonable to assume that necessity and contingency in the *intuitive sense* regard modal properties of sentences or contents, not properties of modal (i.e. world-specific) sentences or contents. Therefore, I have argued, world-specific propositions remain contingent, in the intuitive – that is, the deep – sense, and there is nothing to worry about. The argument can be further illustrated by aid of a parallel with time. In his defence of thin contents, MacFarlane appeals to what Schaffer calls “the most straightforward argument for *Contingentism*”, i.e. the feeling “that certain claims are just evidently contingent” (p.143).³⁵ Eternalists are familiar with a parallel objection. Claims such as (7) below, the argument goes, just evidently, or intuitively, capture a *transient* truth. But on an eternalist account, they must be classified as *true eternally*. Differently put, on an eternalist view – or so the argument goes – one loses the intuitive distinction between propositions that are true with respect to all times and those that are not. Consider:

(7) Merkel is the chancellor of Germany.

Now, eternalists standardly conceive of temporal operators as object-level quantifiers.³⁶ On this view, “eternally” constitutes a universal quantifier over

³⁵ This section draws heavily on Schaffer (2012, section 3.1). See also Schaffer (2018).

³⁶ Richard (1981) and Salmon (2003) offer an alternative approach: Rather than invoking object-language quantification they use intensional operators which manipulate semantic values that do not amount to full-fledged propositions. For discussion cf. Schaffer (2012, p. 131, N. 19).

times, which binds a free time variable t , such that (8), an eternalized version of (7), must be interpreted as (9):

(8) Eternally, Merkel is the chancellor of Germany.

(9) $(\forall t)$ Merkel is the chancellor of Germany at t .

Given that it is not the case that Merkel is the chancellor of Germany at every time t , (8) turns out false on the eternalist view, just as it should. The situation is the same for worlds. Take (10) which, on a quantificational treatment is understood as (11):

(10) Necessarily, Merkel is the chancellor of Germany.

(11) $(\forall w)$ Merkel is the chancellor of Germany at w .

Merkel is quite clearly not the chancellor of Germany at every possible world w . Hence, (10) is false, just as it should be. Differently put, the intuitive, that is, the deep contingency – and by extension, the deep transience – of propositions expressed by sentences like “Merkel is the chancellor of Germany” or “It is 0° C at the base of the Eiffel Tower at noon local time on February 22, 2005” is preserved.

A potential response on MacFarlane’s behalf could go thus: Conceiving of propositions as world-specific might not make them deeply necessary. Still, a semantic view according to which all propositions come out as necessary in the superficial sense – whether this is the intuitive sense or not – is implausible, too. For a response along these lines to convince, however, it would be helpful to have an argument *why* superficial necessity is worrisome. MacFarlane himself does not provide such an argument. In the following sections I will examine a few considerations why it might be hard to come by.

7. Parallels between Eternalism and Necessitarianism

7.1 Times and Worlds

As Schaffer (2012) observes, positions analogous to *eternalism* and *temporalism* can be construed for worlds, which he labels *necessitarianism* and *contingentism*:

Eternalism: For every proposition p , and every bit of time information i_t needed for truth evaluation, i_t is specified in p .

Temporalism: For some proposition p , and some bit of world information i_t needed for truth evaluation, i_t is unspecified in p (equivalently: p is neutral with respect to i_t). (2012, p.126)

Necessitarianism: For every proposition p , and every bit of world information i_w needed for truth evaluation, i_w is specified in p .

Contingentism: For some proposition p , and some bit of world information i_w needed for truth evaluation, i_w is unspecified in p (equivalently: p is neutral with respect to i_w). (2012: p. 128)³⁷

Schaffer proceeds to argue in favour of *Parallelism*, that is, the thesis that the whole case for eternalism can be mimicked by necessitarians: (i) Analogies between pronouns and tense originally discussed by Partee (1973) carry over to pronouns and worlds (Stone 1997, Schaffer 2012, section 2.1); (ii) Complications regarding multiple time-indexing (Kamp 1971, Vlach 1973, van Benthem 1977, Cresswell 1990) similarly arise with respect to the world parameter (Cresswell 1990, Schaffer 2012, section 2.2). Finally, (iii) Richard's (1981) well-known anti-temporalist argument from belief retention can be adapted into an anti-contingentist version (Schaffer, 2012, section 2.3).

Assume that Schaffer is right, and that the major arguments proposed in favour of eternalism carry over neatly to the modal domain. What does this mean for MacFarlane's argument, according to which a rejection of thin contents engenders a view of propositions that are uniformly superficially necessary? The argument, it seems, loses the little bite it had left. Eternalism, a position that dates back to Frege and is held *inter alia* by Stalnaker (1970), Richard (1981,1982), Salmon (1986), Stanley (1997a, 1997b) and King (2003), is a respectable view of propositional content, if not the current orthodoxy, as temporalists like Brogaard (2012: 5) acknowledge. But if eternalism is the orthodoxy, and if the case for necessitarianism runs parallel, the question arises why a commitment to necessitarianism should constitute a problem. Quite to the contrary – it seems much more plausible a position than contingentism. In short, the alleged threat of necessitarianism does not constitute an effective response to the incompleteness worry or a convincing argument in favour of a position as revisionary as radical nonindexical contextualism.

³⁷ Note that eternalism and necessitarianism are demanding views: For them to be correct, all propositions must be time-specific or world-specific. Temporalism and contingentism, by contrast, are comparatively undemanding: For them to be correct, it suffices for there to be a single proposition that is time-neutral or world-neutral respectively. This point will be of importance in the next section.

7.2 The Inevitability of Superficially Necessary Propositions

Those inconvenienced by modal anxiety will presumably have to put up with the phenomenon no matter what. Take actualized sentences such as (12), or claims that explicitly invoke a determinate world such as the (slightly adapted) utterance of Roberto Benigni's character in Jim Jarmusch's film *Down by Law* (1986):

(12) Merkel is actually the chancellor of Germany.

(13) This is a sad and beautiful world.

Suppose (12) and (13) were tokened in world w_1 such that the indexical expression "actually" or the complex demonstrative "this world" draw w_1 from the context of utterance and hence set the world parameter in the circumstance to that very value. Said value remains fixed across possible worlds: On standard assumptions, indexicals and demonstratives are rigid designators, they denote the same entity across all possible worlds. Hence, even if we were to evaluate the propositions expressed by (12) or (13) in worlds that differ in the relevant respects from w_1 , their truth must still be assessed with respect to w_1 . If (12) and (13) are true in the world of tokening, w_1 , they are true necessarily in the superficial sense.

Now imagine a hardnosed contingentist: Though she knows that (12) was tokened in w_1 (and is thus in principle w_1 -specific), she evaluates the proposition expressed with respect to her actual world w_2 . In such a case she would not only change the Austinian Proposition at issue, *but the lekton itself*. Differently put, to force superficial contingency back into the picture, one would have to manipulate the content (in *both* of Recanati's senses of content) from world to world, which seems unacceptable. What this suggests is that the radical nonindexicalist, too, has to put up with at least *some* superficially necessary contents – namely those that make explicit mention of a particular world in the lekton.³⁸ But if superficial necessity is already part of the object language, it is not evident why it is deemed to be troublesome in the first place, in particular given that superficial necessity does not entail deep necessity.

8. Further Arguments in Favour of Thin Contents

The previous section concludes my response to MacFarlane's argument from modal anxiety which, to my knowledge, is the only one that directly addresses the incompleteness worry directly. There are, however, other arguments in

³⁸ One possibility is to conceive of "actually" as assessment-sensitive (a view nobody, to my knowledge, holds). Just like the assessment-sensitivity of predicates of personal taste and epistemic modals, this would constitute an empirical hypothesis about ordinary English.

general support of thin content views, i.e. views according to which it is preferable to account for a particular type of feature (worlds, times, tastes, etc.) by aid of a parameter in the circumstance rather than by postulating tacit indexical elements in the lekton. I will briefly examine some of these arguments with regards to personal taste, our original point of departure.

8.1 The Operator Argument

Kaplan famously argued from the existence of operators such as “necessarily” or “always” to the plausibility of a thin content view (and thus a default distribution according to which worlds and times are parameters in the circumstance of evaluation). Sentential operators shift the world or time with respect to which a content must be evaluated. But if contents were always world- or time-specific, he suggests, such operators would have no linguistic function (Kaplan, 1989: 503).

Kölbel (2009) tailors the argument to the domain of personal taste. In ordinary English, he contents, “for t , p ” (where t designates a person and p stands for a claim of personal taste) shifts the standard of taste with respect to which the content is to be evaluated.³⁹ The FOR operator is supposed to work in similar ways as modal operators. For instance, it renders otherwise contradictory utterances such as (14) and (15) felicitous, and it interacts in analogous ways with quantifiers:

(14) In possible world W , whales are extinct, but whales are not extinct.

(15) For Anna, whale meat is tasty, but whale meat is not tasty. (2009, p. 384)

(16) For some people, Picasso is better than Matisse.

(17) In some possible worlds, the British Empire outlasts the Soviet Union. (2009: 385).

Persuasive as far as it goes, Kölbel’s proposal runs into trouble with utterances containing multiple predicates of personal taste, as argued by Cappelen and Hawthorne (2009, p.75), Kneer (2015, Ch.8) and Kneer, Vicente & Zeman (2017). Consider:

³⁹ More formally, the suggestion is the following:

(S1) For all sentences ϕ and all singular terms α , FOR α , ϕ is a sentence.

(S2) For all ϕ , α , w , s and a : if ϕ is a sentence and α is a personal name referring to a , w is a possible world, and s is a [perspective]: FOR α , ϕ is true in a circumstance $\langle w, s \rangle$ iff ϕ is true in $\langle w, s(a) \rangle$ (where $s(a)$ is a ’s [perspective]) (2009, p. 384)

- (18) Maria ate something that was tasty for Anna in a dignified way.
(19) Frank showed John how to cook something tasty for his wife in a fun way.
(20) For Jane, even the most tasty steak is disgusting.⁴⁰

As the examples demonstrate, “dignified”, “fun” and “tasty” leap out of the scope of the FOR operator. In (18), “dignified” (although not a PPT, it works similarly enough) is relativized to Maria. In (19) “fun” is relativized not to John’s wife but to John, Frank, the speaker, or several of them. And in (20), “tasty” is relativized to the speaker (or perhaps people in general). The FOR operator is thus an unlikely candidate for a *sentential* operator and must be conceived as a *predicate* operator (Kölbel, 2011: 144 acknowledges this, Lasersohn, 2008 as well as MacFarlane, 2012 also conceive of it as a predicate operator). But if this is so, the argument has no bite. Kaplan’s point is that the existence of *sentential* operators justifies the postulation of parameters in the circumstance, because parameters, like sentential operators and unlike predicate operators, shift *sentential* contents. It is, however, not evident how *predicate* operators could justify parameter proliferation in the circumstance of evaluation.

8.2 The Argument from Innocence

In his argument from modal and temporal innocence, Recanati (2007), in contrast to Kaplan, does not infer the existence of modally and temporally neutral (or “innocent”) lekta from the existence of operators, but takes them to be explanatorily prior.⁴¹ He imagines a “modally innocent” linguistic community whose language does not have modal operators. Suppose its members now become modally sophisticated and start to engage in “modal talk”:

Such modal talk can be formally represented in two ways, as we have seen tensed talk can: by using sentence operators, or by explicitly quantifying world variables in the object-language. If we use the modal framework and introduce modal operators such as “actually” or “possibly”, *nothing will be changed for the fragment of the language that does not involve those operators*. The sentence “Rain is wet” will still be a simple, modally innocent sentence. The language will simply have been enriched by the introduction of new resources enabling us to construct more complex sentences. But if we use the standard extensional framework [of first-order logic] and represent modal

⁴⁰ Thanks to Jonathan Schaffer (p.c.) for this example.

⁴¹ Travis (2006) also argues against rich Fregean contents, but his complex arguments would take us too far afield. I hope to respond to them at another occasion.

sentences (“It might be that ...”, “Actually ...”) by means of explicit quantification over possible worlds [...] then, unless special precaution is taken to avoid that consequence, *a change of language takes place*, not merely an enrichment. In the new language, *all* sentences (including simple sentences) now contain a hidden argument-place for a world. Modal innocence is lost. (2007:67-68, italics in the original)

In a nutshell, Recanati argues from the theoretical possibility of a modally (and temporally) innocent *language* to the preservation of modally (and temporally) innocent *sentences* in a modally sophisticated language. The argument relies on an apparently fundamental distinction between an *enrichment* and a *change* of language. Problematically, what demarcates the difference is left undefined. In my view, a modally innocent system of language and thought, deprived of the resources to weigh and decide amongst alternative courses of action (which requires the notion of alternative worlds), and thus devoid of concepts such as *choice*, *expectation*, *decision*, *agency*, *responsibility* and many others essential to our ways of thinking and acting would be a very different system indeed. In fact, it is hard to fathom how the manipulation of another single feature beyond modality could have similarly far-reaching consequences for a conceptual system. The introduction of modal elements into a language previously innocent in this regard must be regarded as a *radical change* (as research on the false-belief task⁴² in developmental psychology also makes abundantly clear), not just an *enrichment*, and the argument, I believe, does not succeed.⁴³

I have argued that the argument from modal innocence is unsuccessful. But even if the argument were convincing, it is clear that it doesn't carry over to the taste debate. Quite to the contrary, it would instead cast doubt on MacFarlane's attempt to take the sting out of the argument from incompleteness, and Kölbel's strategy to extend the operator argument to parameters beyond worlds and times. Here's why: Suppose Recanati were right, and we must preserve the possibility to make sense of world-neutral contents, for instance in order to account for a modally innocent community's grasp of “rain is wet”. A similar move is not available in the PPT debate, as Recanati himself is well aware: The properties designated by PPTs are inherently response-dependent, whereas modal properties are not. Hence imagining a linguistic community in which “delicious” does not invoke an experiencer or judge (and is thus not response-dependent) can teach us but

⁴² See Wimmer & Perner (1983).

⁴³ Note that Recanati himself points out that the option of “going extensional” is not off the table even if the argument did work, as long as special precautions are taken (2007:72; said precautions draw on variadic functions, cf. Recanati, 2002).

little about *our* understanding of predicates of personal taste. In such a community, “delicious” and the like would function like ordinary monadic predicates, the conundrum regarding apparent faultless disagreement cannot arise, and the nonindexicalist would be deprived of her paradigm argument. Nonindexicalists convinced by Recanati’s reasoning would thus be well-advised to defend a fundamental difference between modal and temporal features on the one hand, and personal taste on the other. But once they do, then both Kölbel’s attempt to extend the operator argument to matters of taste, as well as MacFarlane’s response to the argument from incompleteness are off the table. On such a view it makes no sense to argue that the incompleteness worry overgenerates with respect to worlds, precisely because taste and modality are *not* relevantly alike.

8.3 The Binding Argument

Just as in the literature on unarticulated constituents, some arguments in the PPT debate focus on binding. Lasersohn (2008), for instance, examines (21), a standard interpretation of which would be (22):

(21) Every man rode some ride that is fun.

(22) Every man x rode some ride that is fun for x (not necessarily for the other men, or the speaker, or the listeners).

Whereas indexicalists would account for (22) by postulating a bindable perspective variable in the syntactic form of “fun”, Lasersohn has the quantifier interact directly with the perspective *parameter* in the circumstance or index. Binding thus conceived takes place not at the level of the object-language, but at the level of the meta-language.⁴⁴ Lasersohn acknowledges that index binding has less expressive power than variable binding, as becomes evident with respect to claims that contain several predicates of personal taste. Whereas variable binding allows each PPT to be relativized selectively to a particular perspective, on Lasersohn’s approach the quantifier phrase binds into a single (type of) perspective. Consider the following utterance (Lasersohn, 2008, p. 325) and its four candidate readings:

⁴⁴ Following Lasersohn, let ϕ be a sentence, pro a covert pronoun much like the overt pronoun *pro*, M a model, c a context, w a world, p a perspective, P a non-empty set of perspectives, g an assignment and $g[x/n]$ a sequence in which x is the n^{th} element and which agrees with g in all other positions. Then object-language binding is defined by (i), and meta-language binding by (ii):

- (i) $[[\lambda n\phi]]^{M, c, w, p, g} = \{x \in P \mid [[\phi]]^{M, c, w, p, g[x/n]} = 1\}$ (2008, p. 313)
- (ii) (a) If α is a sentence containing at least one occurrence of pro , then $\mu n \alpha$ is a sentence abstract.
 (b) $[[\mu n\phi]]^{M, c, w, p, g} = \{x \in P \mid [[\phi]]^{M, c, w, x, g[x/n]} = 1\}$ ((2008, p. 324)

(23) Every man gave some woman a fun ride and a tasty dish.

(23a) Every man gave some woman a ride and a dish, which were tasty and fun according to the speaker.

(23b) Every man gave some woman a ride and a dish, which was tasty and fun according to each man.

(23c) Each woman received a ride and a dish, which were tasty and fun according to her standards.

(23d) Every man gave some woman a ride fun by his standards, as well as a dish tasty according to her standards.

Index binding can account nicely for readings 23a, 23b, and 23c, according to which the rides and dishes are relativized to the same perspectives. According to Lasersohn, the perspectival uniformity captured by index binding brings out a central nonindexicalist commitment:

[In index binding] we are employing a single, systematic parameter, relative to which all denotations are assigned; and if an operator manipulates this parameter, it will do so for all expressions in its scope. The intuition behind this pattern can perhaps be expressed this way: In a relativist theory, in order to assess a sentence for truth or falsity, one must adopt a stance – that is, truth assessment is always done from a particular perspective. Operators in the sentence may shift the perspective from which truth assessment is to be done, or quantify over such perspectives; and when they do so, the relevant perspective must be adopted for the entire scope of the operator. Because such operators shift the perspective from which truth is assessed, rather than shifting the denotation of some particular expression like a pronoun, they cannot selectively shift only certain items in their scope. (2008, p. 326)

Interpretation 23d, however, requires that “fun” and “tasty” are relativized to different perspectives: Each woman receives a dish tasty by her standards and a ride fun by the standards of some man. Whereas variable binding can, index binding cannot account for this reading. By Lasersohn’s lights this is unproblematic, since “the sentence [i.e. (23)] *cannot mean* that each man gave some woman a ride that was fun for him, and a dish that was tasty for her” (2008, p. 325), which, consequently, “*show[s]* that [predicates of personal taste] cannot have arguments freely chosen from a set of pronouns similar to *pro1, pro2, pro3,...*” (2008, p. 326).

Lasersohn's intuitions as to the nonavailability of reading (26d) seem to be on the right track. However, this one example by no means *shows* that the limited expressive power of index binding suffices *in general* or that predicates of personal taste *cannot* have perspective arguments. Kneer, Vicente and Zeman (2017) demonstrate that certain claims that contain multiple PPTs do, in suitable contexts, require relativization to multiple types of perspectives. Consider:

(24) We took the kids to a resort in Italy this summer. The wine was delicious and the water slide was fun.

An interpretation according to which the wine was delicious for the parents and the water slide for the kids (or the kids and the parents) is not only *available*, it is the default reading (for empirical evidence with native English speakers, see Kneer (2015, Ch.8) and Kneer (in prep. c). The same holds for quantified versions of such multiperspectival claims:

(25) On Halloween, every child would play a silly trick on some adult or else get a delicious treat.

(26) Every steak-lover took some vegetarian friend to the Sunday barbecue for some tasty ribeyes and delicious corncoobs.

(27) On father's day, the fair comes to town. Every dad goes to the fairground with some kid to taste the delicious local brews and try out the fun new rides.

In contrast to what Lasersohn alleges, then, it is not the case that claims with multiple PPTs *cannot* have multiperspectival readings. The resources of index binding are insufficient to account for such readings, and the full expressive power of variable binding is required if we are to account for perspectival plurality. As long as nonindexicalism or relativism cannot account for the multiperspectival interpretations of (25)-(27), an indexicalist framework might be preferable.

9. Conclusion

Let's take stock: Non-indexical contextualism is in no better a position to account for disagreement than indexical contextualism, as long as the truth-conditionally complete proposition is understood as distributed over content *and* circumstance. To account for genuine disagreement (rather than the appearance thereof), radical measures are required: The object of

disagreement, assertion and belief must be conceived as the perspective-neutral content or lekton itself. Such Stoic propositions or thin contents, however, have a whiff of semantic incompleteness about them, and it is doubtful at best whether they can serve to individuate, understand and explain our propositional attitudes and the actions they drive.

However, MacFarlane suggests, the incompleteness worry overgenerates. Building perspective tacitly into the content of taste-claims carries a fully specific proposition on its heels: The time and world features are in no relevant way distinct from perspective, he assumes, and thus need to be included in the propositional content, too. As regards worlds, this seems to raise a problem. Once a contingent proposition is made modally specific, for instance by including an implicit “actually” operator, it is true in all possible worlds. But a semantics that confers necessary modal status onto all contingent propositions is troublesome. Hence, semantic completeness must apparently be resisted on pains of modal anxiety.

MacFarlane’s argument, I have attempted to show, falls prey to several objections. Even if modal anxiety were a serious problem, the conclusion supports moderate nonindexical contextualism rather than radical nonindexicalism, since the inability to account for faultless disagreement seems a lesser problem than semantic incompleteness. More importantly, modal anxiety is in fact unwarranted: As has been demonstrated at length, propositions that turn out necessary in virtue of stipulating a world in the content remain contingent in the intuitive, that is, the deep sense, which concerns the modal properties of sentences or contents. Such propositions are indeed superficially necessary, but necessity thus conceived is only an artefact of the formal apparatus paired with rigid designation. Superficial necessitarianism itself is not an unreasonable position: Given the parallels regarding time- and world-specificity, necessitarianism should be just as much the default position as eternalism, on which the literature has, by and large, converged.

A number of alternative arguments in favour of thin content views were considered. Recanati’s argument from modal innocence, I have argued, is not convincing. But even if it were, its conclusions would not carry over to the domain of taste, because taste properties, in contrast to modal properties, are inherently response-dependent. Kölbel’s attempt to mimic Kaplan’s operator argument in the domain of personal taste is unsuccessful, because “for” does not behave like a sentential operator. Finally, the expressive power of index binding, an ingenious move proposed by Lasersohn, is too limited to account

for perspectival plurality. It is not evident how multiperspectival claims can be formalized if we do not recur to variable binding.

If the above considerations are on the right track, there is little that speaks in favour of perspective-neutral claims of personal taste. Furthermore, it is doubtful whether a coherent challenge from faultless disagreement can be formulated on contextualist premises, at least if a substantial notion of disagreement, rather than the mere appearance thereof, is at play. The nonindexicalist cannot have her cake (faultless disagreement) and eat it (invoke a plausible notion of content). But if the challenge is misconceived, indexicalism with respect to standards of taste remains a viable option. Furthermore, even if treating taste variables as tacit constituents of the content would indeed engender a similar commitment with respect to worlds, there is little reason to discard the position, since superficial necessitarianism is modally unproblematic.

Bibliography

- Aronszajn, M. (1996). A defense of temporalism. *Philosophical Studies*, 81(1), 71-95.
- Austin, J. L. (1971). *Philosophical Papers* (Vol. 20, Vol. 4): Oxford University Press.
- Blackburn, P., & Marx, M. (2002). Remarks on Gregory's "Actually" Operator. *Journal of Philosophical Logic*, 31(3), 281-288.
- Barker, C. (2002). The dynamics of vagueness. *Linguistics and Philosophy*, 25, 1–36.
- Beddor, B. & Egan, A. (2018). Might do better: Flexible relativism and the QUD. *Semantics and Pragmatics* 11(7).
- Beillard, J. (2010). The appearance of faultless disagreement. *Dialogue: Canadian Philosophical Review*, 49(4), 603-616.
- Borg, E. (2005). Saying what you mean: Unarticulated constituents and communication. In R. Elugardo, & R. Stainton (Eds.), *Ellipsis and nonsentential speech* (pp. 237-262): Springer.
- Brogaard, B. (2012). *Transient truths: an essay in the metaphysics of propositions*: OUP USA.
- Cappelen, H., & Hawthorne, J. (2009). *Relativism and monadic truth*. Oxford: Oxford University Press.
- Cappelen, H., & Lepore, E. (2007). The myth of unarticulated constituents. In O'Rourke and Washington (eds.), *Situating Semantics: Essays on the philosophy of John Perry*, 199-214.
- Cresswell, M. J. (1990). *Entities and indices*. Dordrecht: Kluwer.
- Collins, J. (2013). The syntax of personal taste. *Philosophical perspectives*, 27, 51-103.
- Crimmins, M. (1992). *Talk about beliefs*. Cambridge, MA: MIT Press.
- Crossley, J. N., & Humberstone, L. (1977). The logic of "actually". *Reports on Mathematical Logic*, 8(1977), 11-29.
- Davies, M. (2004). Reference, contingency, and the two-dimensional framework. *Philosophical Studies*, 118(1-2), 83-131.

- Davies, M., & Humberstone, L. (1980). Two notions of necessity. *Philosophical Studies*, 38(1), 1-30.
- Dinges, A. (2017). Relativism, Disagreement and Testimony. *Pacific Philosophical Quarterly*, 98, 497-519.
- Dowell, J. L. J. (2011). A Flexible Contextualist Account of Epistemic Modals. *Philosophers' Imprint*, 11(14), 1-25.
- Egan, A. (2007). Epistemic modals, relativism and assertion. *Philosophical Studies*, 133(1), 1-22.
- Egan, A. (2010). De Gustibus Non Disputandum Est (At Least, Not Always). In R. Feldman & T. Warfield (Eds.), *Disagreement*. Oxford: Oxford University Press
- Egan, A., Hawthorne, J., & Weatherson, B. (2005). Epistemic modals in context. In G. P. Preyer, G. (Ed.), *Contextualism in philosophy* (pp. 131-168). Oxford: Oxford University Press.
- Evans, G. (1979). Reference and Contingency. *The Monist*, 62(2), 161-189.
- Evans, G. (1985). Does tense logic rest on a mistake? In *Collected Papers* (pp. 343-363): Oxford: Clarendon Press.
- Ferrari, F. & Zeman, D. (2014). Radical relativism, retraction, and "being at fault". In S. Caputo, M. Dell'Utri, M. & F. Bacchini (eds.), *New Frontiers in Truth*. Cambridge Scholar. pp. 80-102 (2014)
- Von Fintel, K., & Gillies, A. S. (2008). CIA leaks. *Philosophical review*, 117(1), 77-98.
- Von Fintel, K., & Gillies, A. S. (2011). Might made right. *Epistemic modality*, 108-130.
- Fitch, G. (1998). Temporalism revisited. *Philosophical Studies*, 92(3), 251-256.
- Frege, G. (1979). Logic. In H. Hermes, H. Kambartel, & F. Kaulbach (Eds.), *Posthumous Writings*. Chicago: University of Chicago Press.
- Glanzberg, M. (2007). Context, content, and relativism. *Philosophical Studies*, 136(1), 1-29.
- Gregory, D. (2001). Completeness and decidability results for some propositional modal logics containing "actually" operators. *Journal of Philosophical Logic*, 30(1), 57-78.
- Hanson, W. H. (2006). Actuality, necessity, and logical truth. *Philosophical Studies*, 130(3), 437-459.
- Hodes, H. T. (1984). Axioms for actuality. *Journal of Philosophical Logic*, 13(1), 27-34.
- Huvenes, T. (2012). Varieties of disagreement and predicates of taste. *Australasian Journal of Philosophy* 90 (1):167-181.
- Kamp, H. (1971). Formal properties of 'now'. *Theoria*, 37, 227-274.
- Kaplan, D. (1989). Demonstratives. In J. Almog, J. Perry, & H. Wettstein (Eds.), *Themes From Kaplan* (pp. 481-563): Oxford University Press.
- Khoo, J. (2015). Modal disagreements. *Inquiry* 5(1), 1-24.
- King, J. and Stanley, J. (2005). Semantics, pragmatics, and the role of semantic content. In Z. Szabó (ed.), *Semantics vs. Pragmatics*. Oxford: Oxford University Press.
- Kment, B. (2017). Varieties of modality. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy*. Stanford: Stanford University.
- Kneer, M. (2015). *Perspective in Language*. PhD Dissertation, Ecole Normale Supérieure / EHESS, Paris.
- Kneer, M., Vicente, A., & Zeman, D. (2017). Relativism about predicates of personal taste and perspectival plurality. *Linguistics and Philosophy*, 40(1), 37-60.
- Kneer, M. (in prep. a) Predicates of personal taste: Empirical data.

- Kneer, M. (in prep. b). Epistemic modals are not assessment-sensitive.
- Kneer, M. (in prep. c). Perspectival Plurality: Evidence from native English speakers.
- Knobe, J., & Yalcin, S. (2014). Epistemic modals and context: Experimental data. *Semantics and Pragmatics*, 7(10), 1-21.
- Kölbel, M. Faultless disagreement. In *Proceedings of the Aristotelian Society (Hardback), 2004a* (Vol. 104, pp. 53-73): Wiley Online Library
- Kölbel, M. (2004b). Indexical relativism versus genuine relativism. *International Journal of Philosophical Studies*, 12(3), 297-313.
- Kölbel, M. (2009). The evidence for relativism. *Synthese*, 166(2), 375-395.
- Kompa, N. (2015). Contextualism and disagreement. *Erkenntnis*, 80(1), 137-152.
- Kripke, S. A. (1972). *Naming and necessity*. Springer.
- Lasersohn, P. (2005). Context Dependence, Disagreement, and Predicates of Personal Taste. *Linguistics and Philosophy*, 28(6), 643-686.
- Lasersohn, P. (2008). Quantification and perspective in relativist semantics. *Philosophical Perspectives*, 22(1), 305-337, doi:10.1111/j.1520-8583.2008.00150.x.
- Lasersohn, P. (2009). Relative truth, speaker commitment, and control of implicit arguments. *Synthese*, 166(2), 359-374, doi:10.1007/s11229-007-9280-8.
- Lasersohn, P. (2011). Context, relevant parts and (lack of) disagreement over taste. *Philosophical Studies*, 156(3), 433-439.
- Lasersohn, P. (2016). *Subjectivity and Perspective in Truth-Theoretic Semantics*. Oxford: Oxford University Press
- López de Sa, D. (2007). The many relativisms and the question of disagreement. *International Journal of Philosophical Studies*, 15(2), 269 – 279.
- López de Sa, D. (2008). Presuppositions of commonality: An indexical relativist account of disagreement. In M. Garcia-Carpintero and Kölbel, M. (eds.), *Relative truth* (pp. 297-310). Oxford: Oxford University Press.
- López de Sa, D. (2015). Expressing disagreement: A presuppositional indexical contextualist relativist account. *Erkenntnis*, 80(1), 153-165.
- Ludlow, P. (2001). Metaphysical austerity and the problems of temporal and modal anaphora. *Noûs*, 35(s15), 211-227.
- Marushak, A. (2018). *Reasons and Modals*. PhD Dissertation, University of Pittsburgh.
- Marushak, A. & Shaw, J. Epistemics and Emotives. In prep.
- MacFarlane, J. (2007). Relativism and disagreement. *Philosophical Studies*, 132(1), 17-31.
- MacFarlane, J. (2009). Nonindexical contextualism. *Synthese*, 166(2), 231-250.
- MacFarlane, J. (2011). Epistemic Modals are Assessment-Sensitive. *Epistemic modality*, 144.
- MacFarlane, J. (2014). *Assessment sensitivity: Relative truth and its applications*. Oxford: Oxford University Press.
- Marques, T. (ms). Falsity and Retraction: New Experimental Data on Epistemic Modals.
- Marques, T. (2014). Doxastic disagreement. *Erkenntnis* 79: 121-142.
- Marques, T. (2015). Disagreeing in context. *Frontiers in Psychology*, 6, 257.
- Marques, T., & García-Carpintero, M. (2014). Disagreement about taste: commonality presuppositions and coordination. *Australasian Journal of Philosophy*, 92(4), 701-723.

- Moltmann, F. (2010). Relative truth and the first person. *Philosophical Studies*, 150(2), 187-220.
- Partee, B. H. (1973). Some structural analogies between tenses and pronouns in English. *The Journal of Philosophy*, 70(18), 601-609.
- Pearson, H. (2012). A judge-free semantics for predicates of personal taste. *Journal of Semantics*, 30(1), 103-154.
- Perry, J. (1986). Thought without representation. *Proceedings of the Aristotelian Society, Supplementary Volumes*, 137-166.
- Plunkett, D., & Sundell, T. (2013). Disagreement and the semantics of normative and evaluative terms. *Philosopher's Imprint*, 13.
- Recanati, F. (2002). Unarticulated constituents. *Linguistics and Philosophy*, 25(3), 299-345.
- Recanati, F. (2004). *Literal meaning*. Cambridge: Cambridge University Press.
- Recanati, F. (2007). It is raining (somewhere). *Linguistics and Philosophy*, 30(1), 123-146, doi:10.1007/s10988-006-9007-1.
- Recanati, F. (2007) *Perspectival Thought: A Plea for (Moderate) Relativism*. Oxford: Clarendon Press.
- Roberts, C. (in prep.) The Character of Epistemic Modality: Evidential indexicals
- Richard, M. (1981). Temporalism and eternalism. *Philosophical Studies*, 39(1), 1-13.
- Richard, M. (1982). Tense, propositions, and meanings. *Philosophical Studies*, 41(3), 337-351.
- Richard, M. (2004). Contextualism and relativism. *Philosophical Studies*, 119(1), 215-242.
- Richard, M. (2008). *When truth gives out*. Oxford: Oxford University Press.
- Richard, M. (2011). Relativistic content and disagreement. *Philosophical Studies*, 156(3), 421-431, doi:10.1007/s11098-010-9687-9.
- Saebo, J.S. (2009). Judgment Ascriptions. *Linguistics and Philosophy* 32, 327-352.
- Salmon, N. (1986). *Frege's puzzle*. Cambridge, MA: MIT Press.
- Salmon, N. (2003). Tense and Intension. In Q. Smith, & A. Jokic (Eds.), *Time, tense, and reference* (pp. 107-154). Cambridge, MA: MIT Press.
- Schaffer, J. (2011). Perspective in taste predicates and epistemic modals. In A. Egan, & B. Weatherson (Eds.), *Epistemic modality*: Oxford University Press.
- Schaffer, J. (2012). Necessitarian propositions. *Synthese*, 189(1), 119-162.
- Schaffer, J. (2018). Confessions of a schmentencite: towards an explicit semantics. *Inquiry*, 1-31.
- Sennet, A. (2011). Unarticulated constituents and propositional structure. *Mind & Language*, 26(4), 412-435.
- Stalnaker, R. (1970). Pragmatics, reprinted in. In *Context and Content: Essays on Intentionality in Speech and Thought* (pp. 31-46). Oxford: Oxford University Press.
- Stanley, J. (1997a). Names and rigid designation. In B. Hale, & C. Wright (Eds.), *A Companion to the Philosophy of Language* (pp. 555-585). Oxford: Blackwell Publishers.
- Stanley, J. (1997b). Rigidity and content. In R. Heck (Ed.), *Logic, Language and Reality: Essays in Honor of Michael Dummett* (pp. 131-156). Oxford: Oxford University Press.

- Stephanou, Y. (2005). First-Order Modal Logic with an 'Actually' Operator. *Notre Dame Journal of Formal Logic*, 46(4), 381-405.
- Stojanovic, I. (2007). Talking about taste: disagreement, implicit arguments, and relative truth. *Linguistics and Philosophy*, 30(6), 691-706.
- Stojanovic, I. (2012). On Value-Attributions: Semantics and Beyond. *The Southern Journal of Philosophy*, 50(4), 621-638, doi:10.1111/j.2041-6962.2012.00137.x.
- Stojanovic, I. (2017). Context and disagreement. *Cadernos de Estudos Linguísticos*, 59(1), 7-22.
- Stone, M. (1997). *The anaphoric parallel between modality and tense*. Philadelphia: Department of Computer and Information Science Technical Reports, University of Pennsylvania.
- Sundell, T. (2011). Disagreements about taste. *Philosophical Studies*, 155(2), 267-288.
- Sundell, T. (2017). Aesthetic Negotiations. In James Young (ed.), *The Semantics of Aesthetic Judgment*. Oxford: Oxford University Press.
- Taylor, K. A. (2001). Sex, breakfast, and descriptus interruptus. *Synthese*, 128(1-2), 45-61.
- Travis, C. (2006). *Thought's footing: A theme in Wittgenstein's philosophical investigations*. Oxford University Press.
- van Benthem, J. (1977). Tense logic and standard logic. *Logique et analyse*, 20(80), 395-437.
- Vlach, F. (1973). *'Now' and 'then': A formal study in the logic of tense anaphora*. (Ph.D. Dissertation). University of California Los Angeles,
- Von Fintel, K., & Gillies, A. S. (2008). CIA leaks. *Philosophical Review*, 117(1), 77-98.
- von Fintel, K., & Gillies, A. S. (2009). 'Might' Made Right. In A. Egan, & B. Weatherson (Eds.), *Epistemic modality*: Oxford University Press.
- Wettstein, H. K. (1979). Indexical reference and propositional content. *Philosophical Studies*, 36(1), 91-100.
- Wimmer, H. & Perner, J. (1983). Beliefs about beliefs: Representation and constraining function of wrong beliefs in young children's understanding of deception. *Cognition*. 13 (1): 103–128.
- Wright, C. (2001). On being in a quandary. Relativism vagueness logical revisionism. *Mind*, 110(437), 45-98.
- Yanovich, I. (2013). Standard contextualism strikes back. *Journal of semantics*, ffs022.
- Zakkou, J. (2019). Denial and retraction: a challenge for theories of taste predicates. *Synthese*, 196(4), 1555-1573.
- Zakkou, J. (2019). Embedded taste predicates. *Inquiry*, 62(6), 718-739.