6 Contextualism Versus Relativism

More Empirical Data

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1. Introduction

Let me not waste your time: There are three major truth-conditional accounts that purport to explain the semantics of perspectival claims regarding e.g. personal taste,[1] epistemic modality,[2] or aesthetic evaluation.[3] They differ with respect to two orthogonal dimensions, namely (i) Whether the perspectival element (e.g. a standard of taste or an epistemic perspective) is conceived as part of the *content* of the proposition uttered or as a *parameter* in the circumstance of evaluation and (ii) whether the extension of such claims is sensitive to the *context of utterance* or whether it can, at times, be sensitive to a *context of assessment*. (For recent reviews of the literature, see e.g. Stojanovic, 2017 and Glanzberg, 2021.)

According to indexical contextualism (e.g. Glanzberg, 2007; Stojanovic, 2007, 2017; Cappelen & Hawthorne, 2009; Schaffer, 2011) an utterance of "Salmon is delicious" features a tacit, quasi-indexical perspectival element in the proposition's *content* which is drawn from the context of utterance. Nonindexical contextualists (e.g. Kölbel, 2002, 2004, 2009; Recanati, 2007) argue that a position of this sort cannot accommodate the phenomenon of faultless disagreement. The proposition itself, they suggest, is taste-neutral, and the standard of taste is, like worlds or times, part of the Kaplanian circumstance of evaluation (or a Lewisian index).

Relativists (e.g. MacFarlane, 2014; Egan, 2007, 2010) agree with nonindexical contextualists that perspectival features are best located in the circumstance and not the propositional content. However, and in contrast to both kinds of contextualism, relativists look beyond the context of utterance and make room for dynamic updating: people's tastes, aesthetic standards, and epistemic situations can change, and if they do, a perspectival claim true at the context of utterance might be false as evaluated from a later context of assessment. Here's MacFarlane:

> When our own tastes change, so that a food we used to find pleasant to the taste now tastes bad, we may say that we were mistaken in saying that the food was "tasty." When I was a kid, I once told my

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> mother, "Fish sticks are tasty." Now that I have exposed my palate to a broader range of tastes, I think I was wrong about that; I've changed my mind about the tastiness of fish sticks. So, if someone said, "But you said years ago that fish sticks were tasty," I would retract the earlier assertion. I wouldn't say, "They were tasty then, but they aren't tasty any more," since that would imply that their taste changed. Nor would I say, "When I said that, I only meant that they were tasty to me then." I *didn't* mean that. At the time I took myself to be disagreeing with adults who claimed that fish sticks weren't tasty.
>
> (2014, pp. 13–14)

What the passage highlights is that the dynamic nature of the relativist view entails *two* norms of assertion. One, labelled the "Reflexive Truth Rule," specifies the conditions under which one is warranted to *make* an assertion.

> **Reflexive Truth Rule:** An agent is permitted to assert that p at context c_1 only if p is true as used at c_1 and assessed from c_2.
>
> (2014, p. 103)

Given that the only context that matters for the making of assertions is the context of utterance (or "use"), this might leave "contexts of assessment without any *essential* role to play" (2014, p. 104). However, on the dynamic account of assertion proposed by relativists, there's a second rule in place—a rule which specifies under which conditions one must *retract* an assertion:

> **Retraction Rule:** An agent in context c_2 is required to retract an (unretracted) assertion of *p* made at c_1 if p is not true as used at c_1 and assessed from c_2.
>
> (2014, p. 108)

Naturally, a retraction cannot simply wipe the retracted assertion from the conversational record. However, that's not the point. Instead, in taking back an assertion we attempt "to 'undo' the normative changes effected by the original speech act" (MacFarlane, 2014, p. 108; for discussion about retraction in particular, see e.g. Ferrari (2016), Marques (2014a, 2018), Kneer (2015, 2021a), Zakkou (2019a), Caponetto (2020), and Dinges (this volume)).

Truth relativism about perspectival expressions is a descriptive theory, which makes hypotheses about norms of assertion in ordinary English. The norms in question are conventional, non-codified, behaviour-dependent rules, which govern our linguistic practice (at least in certain domains). Norms of this kind are social facts, and as such, they are suited to empirical investigation: we can test whether ordinary language speakers are

inclined to act in conformity with the proposed linguistic conventions and whether their normative assessments of pertinent perspective-dependent assertions track the Truth and Retraction Rules. If this were the case, then the core tenets of relativism are in place (though they could possibly be spelled out in terms of competing theories with similar explanatory power). If people's linguistic behaviour (and assessment thereof) proves inconsistent with the proposed norms of assertion, both the force of the relativist critique of contextualism as well as the central pillars of the relativist view itself collapse.

This chapter surveys some recent experiments concerning the norms of assertion proposed by relativism (Section 2). Amongst ordinary English speakers, there is evidence against the Truth Rule (Knobe & Yalcin, 2014; Kneer, 2015, 2021a) and the Retraction Rule (Kneer, 2015, 2021a; Marques, ms). Moreover, the empirical literature on norms of assertion is increasingly converging on the position that such a norm is not factive in the first place. Consequently, there's little reason to assume that the norms of *perspectival* assertions differed in this regard.

However, there are some interesting diverging findings. Dinges and Zakkou (2020) present conflicting results regarding the Truth Rule, reporting a distinct lack of agreement with *both* contextualist and relativist predictions concerning the truth assessment of taste claims. Furthermore, according to Knobe and Yalcin (2014), the folk seem to agree with some sort of retraction rule for epistemic modal claims (despite disagreeing with MacFarlane's Truth Rule). Both in Dinges and Zakkou's and in Knobe and Yalcin's experiments, I would like to suggest, the tested target statements might not adequately mirror what is at stake in the contextualism/relativism debate.

To anticipate the findings: in Dinges and Zakkou's study, the lack of agreement with the contextualist predictions might be due to an inadequate formulation of the response claim. Three experiments that attempt to remedy this potential shortcoming lend support to contextualist truth assessment (Sections 3 to 5). Knobe and Yalcin's study concerning a norm of retraction, by contrast, asks participants whether it is "appropriate" for a speaker to take back an epistemic modal claim whose prejacent is false at the context of assessment. What is appropriate, however, need not be required. Relativists like MacFarlane (see quotation earlier), just like most theorists in the debate concerning norms of assertion, however, tend to state their hypothesized rules in terms of what is *required* or *mandatory*, or what *must, ought* and *should* be done. What they are concerned with are *core* or potentially *constitutive* rules of assertion, and these can be expected to invoke strict normative force. Such rules contrast with *peripheral rules* that help regulate our assertive practices, characterized inter alia by a more lenient normative force, of which there surely are many. It is, for instance, *appropriate* or *commendable* to express oneself with *clarity* and *precision*. However, neither of these two norms have

witnessed much attention in the literature about *the* (central or constitutive) norms of assertion, let alone the contextualism/relativism debate. Section 6 thus reports a replication of Knobe and Yalcin's study, both with their original formulation of the retraction question as well as a version that tracks MacFarlane's Retraction Rule. Whereas people—in line with Knobe and Yalcin's results—find it appropriate to take back epistemic modal claims whose prejacent turns out false at the context of assessment, they *disagree* with the assessment that retraction is *required*.

Overall, the findings of the three experiments question the adequacy of the relativist Truth Rule and the Retraction Rule. The extension of perspectival claims depends on the context of utterance, and there is no requirement of any sort to retract them at a later context of assessment (although one may sometimes do so).

2. Empirical Data

2.1. Utterance Sensitivity and Retraction for Perspectival Claims

Let's begin with the story MacFarlane uses to motivate relativism with respect to predicates of personal taste. In several experiments (Kneer, 2015, ch. 7; 2021a), participants were presented with a scenario based on said fish sticks scenario, quoted earlier. The vignette came in two versions, either containing a claim about the truth assessment of a previous taste claim [A] or else the requirement for retraction [B]:

> FISH STICKS
>
> John is five years old and loves fish sticks. One day he says to his sister Sally: "Fish sticks are delicious." Twenty years later his taste regarding fish sticks has changed. Sally asks him whether he still likes fish sticks and John says he doesn't anymore.
>
> [A] Sally says: "So what you said back when you were five was false."
> [B] Sally says: "So you are required to take back what you said about fish sticks when you were five."
> Q. To what extent do you agree or disagree with Sally's claim?

Participants responded to the questions on a seven-point Likert scale anchored at 1 with "completely disagree" and at 7 with "completely agree." Advocates of a contextualist semantics would hypothesize agreement with both claims of Sally to be low. After all, what, on this theory, matters for truth-assessment is the context of utterance, at which John's claim was true. A relativist semantics, however, would predict agreement

with Sally's assertion that John's original claim was false, since it is false at the context of assessment. Given that it *is* false at the context of assessment, relativists would further hypothesize, and given that Sally challenges John, he must retract his original claim. Relativists would predict mean agreement with the proposed truth assessment and required retraction to be significantly above the midpoint of the scale. Contextualists, by contrast, would predict the means to lie significantly below the midpoint of the scale.

Consistent with contextualism and inconsistent with relativism, people strongly disagreed with the claim that John's original assertion was false or that he should retract it. Similar results were found for another predicate of personal taste, namely "fun" (the "Sandcastle scenario"). Although it is the relativist's paradigm example, reasonable concerns might be voiced concerning the time lag between a childhood claim as to fish sticks' tastiness and a challenge in adult life. Reducing the time span between the context of utterance and the context of assessment, however, does not make a difference (Kneer, 2021a, Exp. 2, "Salmon scenario"). Figure 6.1 visually represents the findings. All means are significantly below the midpoint of the scale (one-sample *t*-tests, all *ps* < .001).

For a different type of perspectival expression (epistemic modals), Knobe and Yalcin (2014) also report evidence for truth-assessment along contextualist lines. Kneer (2015, ch. 6; ms) further finds that assertions such as "John might be in China" are judged truth-conditionally on a par with "For all I know, John is in China," the contextualist's preferred interpretation of "might" claims. Marques (ms) reports results favouring

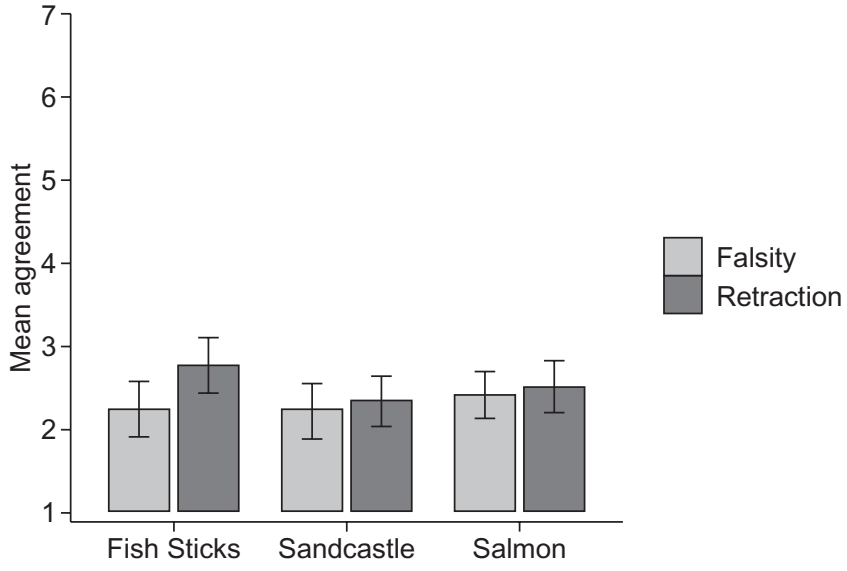

Figure 6.1 Mean agreement with the statement that an original taste claim was false at the context of utterance and that it must be retracted given preference reversals across different scenarios. Error bars denote standard error of the mean.

a contextualist semantics for epistemic modals for native Spanish speakers. Despite considerable convergence, there are some findings that call contextualism into question. To these we will turn in Sections 2.3 and 2.4 after a brief look at the literature on norms of assertion that is not directly concerned with perspectival claims.

2.2. Norms of Assertion

Much of the contextualism/relativism debate centers on the validity of the norms of assertion and retraction proposed by relativists. It is thus surprising that the extensive literature about norms of assertion in general is hardly discussed in this context. However, as I will briefly argue, the latter also casts doubt on the hypotheses that our assertions—perspectival or not—are governed by (something like) MacFarlane's Truth Rule or the Retraction Rule.

For several decades, philosophers have explored the question of what, if anything, is required of a speaker to be in a position to assert a certain proposition *x* (for an excellent review, see Pagin, 2014). On the most demanding (and most widely defended) account, in order to assert *x*, the speaker must *know that x* (the *knowledge account*, see e.g. Williamson, 1996, 2000; Hawthorne, 2004; Turri, 2011). According to an alternative view, for a speaker to assert *x*, *x* must simply be *true*—though it need not be known (the *truth account*, see e.g. Weiner, 2005). Both views are *factivist* in so far as they require the asserted proposition to be true. *Nonfactivists* argue that if it were only ever appropriate to assert true propositions, the number of warranted assertions we make would be rather limited. This either suggests that the alleged (factive) norm of assertion doesn't really do much to regulate our communicative behaviour (the force and importance of such a norm is limited), or else the norm of assertion simply is not factive. The position that the central rule of assertion is not tied to propositional truth, it should be noted, still allows for the possibility that assertion *aims* at (the conveying of) truth (see Marsili, 2018, 2020, 2021). Some nonfactivists thus propose that in order to assert *x*, it suffices to have a justified belief as to *x*, even if *x* is false (the *justified belief account*, e.g. Douven, 2006; Lackey, 2007). Other nonfactivists are more lenient still and advocate a view according to which one can say whatever one believes (the *belief account*, e.g. Bach, 2008; Hindriks, 2007; Mandelkern & Dorst, ms).

What the debate about norms of assertion can contribute to the debate about norms of retraction is this: only if assertability depends on propositional truth in general does it make sense to postulate norms of assertion and retraction for perspectival claims that do. If, for instance, the justification account were correct and it were acceptable to assert a justified yet false proposition, then it is obscure why perspectival claims should be governed by something like MacFarlane's Truth and Retraction Rules.

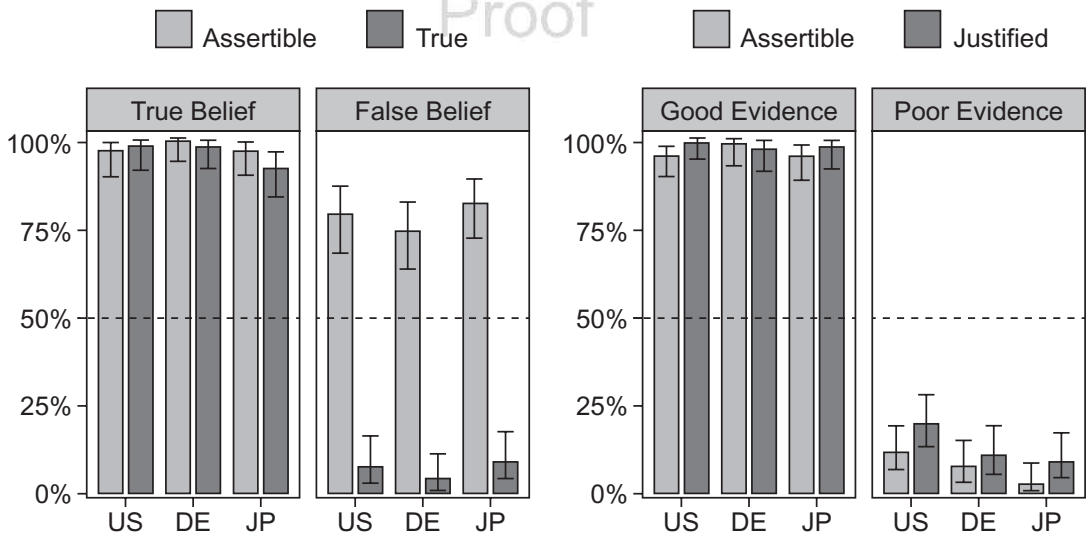

Figure 6.2 *Left*—Proportions of participants who judged a justified claim *x* assertible and true across conditions (true v. false); *Right*—Proportions of participants who judged a claim assertible and justified across conditions (good v. poor evidence).

Source: Kneer (2021b, p. 2).

Whether human communication is indeed regulated by norms of assertion and what these might be is, of course, an empirical question (Douven, 2006; Turri, 2013; Pagin, 2016). There is some evidence that points towards a factive norm of assertion (Turri, 2011, 2015; for an overview see Turri, 2017). However, studies from other researchers have increasingly converged on the position that the norm of assertion is most likely justified belief (Kneer, 2018; Reuter & Brössel, 2019; Marsili & Wiegmann, 2021). In a large cross-cultural study with more than 1,000 native speakers from the US, Germany, and Japan, for instance, it perspired that people think that a speaker should assert that *x* in cases where *x* is false yet justified (Figure 6.2, left), though should not assert that *x* when he has poor evidence for his claim (Figure 6.2, right).

In short, given that assertion, in general, does not seem to be governed by a norm tied to propositional truth, it is unclear why perspectival claims should.

2.3. Knobe and Yalcin

Knobe and Yalcin (2014) presented their participants with the following vignette, which is closely modelled on an example by MacFarlane (2011):

> Sally and George are talking about whether Joe is in Boston. Sally carefully considers all the information she has available and concludes that there is no way to know for sure.

SALLY SAYS: "Joe might be in Boston."
Just then, George gets an email from Joe. The email says that Joe is in Berkeley. So George says: "No, he isn't in Boston. He is in Berkeley."

On a seven-point Likert-scale, participants were asked to report to what extent they agreed or disagreed with one of the following two claims:

[Truth assessment] What Sally said is false.
[Retraction] It would be appropriate for Sally to take back what she said.

As a control condition, there was an alternative scenario in which Sally does not say that Joe *might be* in Boston but simply asserts that he *is* in Boston. The experiment thus took a 2 *claim type* (indicative v. modal) × 2 *question type* (truth assessment v. retraction) between-subjects design. Figure 6.3 graphically represents the results.

The truth assessment of epistemic modal claims, the results suggest, is sensitive to the context of utterance and not the context of assessment. It thus confirms a contextualist view of epistemic modals and challenges relativism. What is astonishing is this: although the modal claim is *not* considered false, it is nonetheless judged appropriate to retract it. Beddor and Egan (2018, p. 9) thus wonder whether the data really support contextualism. There are thus three questions that arise: (i) Why do they differ from other retraction findings for both epistemic modals and taste claims that uniformly suggest there is no norm of retraction, (ii) what could explain them, and (iii) does the data cast doubt on contextualism as, e.g., Beddor and Egan (2018, p. 9) wonder? We will come back to these questions in section 6.

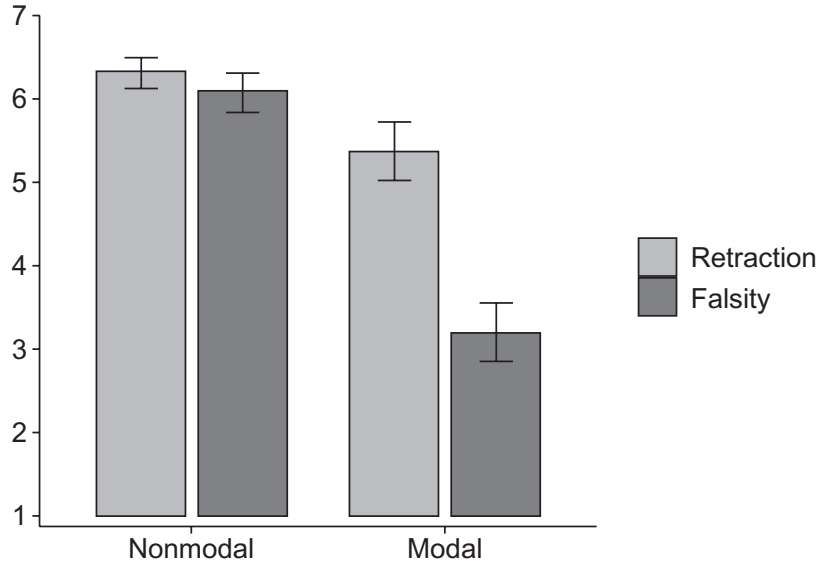

Figure 6.3 Mean ratings for the nonmodal and modal condition. Error bars designate standard error of the mean.

Source: (Knobe & Yalcin, 2014, p. 15)

2.4. Dinges and Zakkou

In a rich and interesting paper, Dinges and Zakkou report experiments concerning the expression "tasty." Here's one of their vignettes (2020, p. 8) and the questions they asked participants:

> Yumble is a new brand of bubblegum. You have never had a Yumble. One day you decide to try one. You don't like the taste. You tell your friend Paul:
>
> "Yumble isn't tasty."
>
> A few weeks later, you and Paul meet at the check-out in the supermarket. Yumble hasn't changed its taste, but you have now come to like it. You take a pack from the shelf. Paul says:
>
> "That's funny, I have a clear recollection of you saying 'Yumble isn't tasty' last time we met!"
>
> For each of the following responses, please tell us how likely you would be to give this response to Paul's remark in the given context.
>
> "What I said was false. Yumble is tasty." [Scale from 0–100]
>
> "What I said was true. Still, Yumble is tasty." [Scale from 0–100]

The key idea of the experiment was to have people rate *both* a relativist response ("What I said was false. Yumble is tasty") *and* a contextualist response ("What I said was true. Still, Yumble is tasty"). In the scenario, Paul starts out disliking Yumble and comes to like it. This type of preference reversal, labelled "not liking to liking" or "NLtoL" by Dinges and Zakkou, is complemented by one in the opposite direction, labelled "liking to not liking" or "LtoNL" for short. Participants were presented with either the NLtoL or the LtoNL condition. Figure 6.4 graphically presents the results.

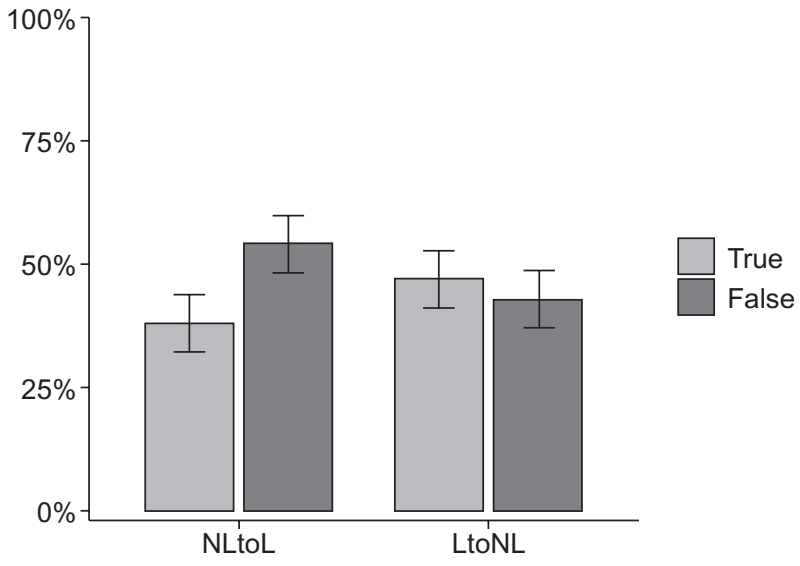

Figure 6.4 Mean ratings by condition. Error bars show 95% CI.
Source: (Dinges & Zakkou, 2020, p. 10).

A mixed ANOVA with *truth assessment* (true v. false) as the within-subjects variable and taste reversal *direction* (NLtoL v. LtoNL) as the between-subjects variable revealed no significant main effect for truth assessment (p = .11) or direction (p = .50). The interaction, however, was significant (p = .007, η_p^2 = .025 a small effect). The data thus suggests two main findings: First, neither of the two responses—one relativist, one contextualist—finds particular favour or disfavour with participants. The reported likelihood of asserting either sit roughly at the midpoint of the scale. Dinges and Zakkou call this finding the *Even Split*. Second, the direction of preference reversal—liking to not liking versus not liking to liking—does have an impact on the results (the *Direction Effect*).

What should give us pause is the *Even Split*.[4] Contextualists and relativists would predict mean endorsement of the response corresponding to their position to be not only significantly but substantially above the midpoint (perhaps around 70%, though what counts as "substantially above" is of course debatable). However, mean endorsement for all four values hovers around the midpoint (and for most does not differ substantially from it), suggesting that on average, people report it neither likely nor unlikely that they'd make either of the two suggested utterances in response to their interlocutor's challenge. These results are at odds with most previous studies—for both predicates of personal taste and epistemic modals—which found robust support for contextualist and against relativist truth-assessment. What explains the difference in results and how come—overall—there is no significant, let alone substantive endorsement of either claim in Dinges and Zakkou's studies?

2.5. Summary and Outlook

Let's take stock: Some results suggest that the truth of perspectival claims is sensitive to the context of utterance and that there is no retraction requirement. Findings of this sort exist for both taste claims (Kneer, 2015, 2021a) and epistemic modals (Kneer, 2015, ms; Marques, ms). Knobe and Yalcin's (2014) data are consistent with these results as regards the truth assessment of epistemic modal claims, whose truth is shown to depend on the context of utterance, not the context of assessment in several studies. Curiously, however, Knobe and Yalcin nonetheless find evidence in favour of a retraction rule, even for claims that are deemed true at the relevant context of assessment. Dinges and Zakkou's findings challenge the results of all other studies that converge on contextualist truth assessment: people are neither particularly willing nor particularly unwilling to answer in line with the predictions of contextualism or relativism. Given that the Truth Rule is more fundamental than the Retraction Rule, I will first explore Dinges and Zakkou's findings in more detail.

3. The Even Split—Experiment 1

In Dinges and Zakkou's scenario, the reader is in the role of someone whose tastes regarding a particular bubble gum changes either from liking to not liking or vice versa. The reader is then prompted to rate how likely they are to give one of the following two responses (here in the case of liking to not liking) upon being challenged by another character:

> [Relativist] "What I said was false. Yumble is tasty." [Scale from 0–100]
> [Contextualist] "What I said was true. Still, Yumble is tasty." [Scale from 0–100]

As discussed, participants' likelihood ratings were roughly at the midpoint of the scale for either response (see Figure 6.4). What could explain these results? Perhaps the evident place to look is the formulation of the contextualist claim: "What I said was true. Still, Yumble is tasty." Contextualists might object that this is an adequate way of testing their predictions. Dinges and Zakkou address precisely this worry:

> Contextualists might still complain that we are artificially downgrading the "true" response. A more natural way of putting it, they might say, would be something like "What I said was true. Still, Yumble is tasty *to me now*." Contextualists would presumably explain the difference in naturalness between this response and the one we offer by assuming some kind of communicative ideal to make tacit arguments explicit whenever there is a threat of misunderstanding. Note, however, that our primary concern is whether people prefer the "true" to the "false" response or *vice versa*. Even if our "true" response fails to live up to the indicated ideal, it should still be preferable to the "false" response according to contextualism. After all, even as stated, the "false" response is false according to contextualism and the "true" response true. One would normally not prefer to say something outright false to saying something true just because the true claim is not ideal in terms of a possible misunderstanding. This is not to say, of course, that it would be uninteresting to modify the "true" response in the suggested way and to see how this affects results.
>
> (p. 9, FN. 21)

As a card-carrying contextualist, my worry about the formulation of the contextualist claim is not quite put to rest by this. According to contextualist semantics, the context of assessment simply doesn't play a meaningful role for truth-assessment. In the experiment, following up one's insistence "What I said was true" with "Still, Yumble is tasty" sounds confusing, if not confused, and the expression "still" can trigger a sense

of contradiction. Dinges and Zakkou argue that "[e]ven if our "true" [i.e. the contextualist] response fails to live up to the indicated ideal, it should still be preferable to the "false" response according to contextualism." But this is not evident. If, as suggested, the "true" response sounds confused, it remains unclear why it should do any better than the "false" response (i.e. the relativist response), for which previous experiments, like Dinges and Zakkou's itself, do not find much support. These complications could have been avoided by employing the standard design for experiments of this sort, in which people are simply asked to what extent they agree with the claim that a previous perspectival assertion is true or false.[5]

If these thoughts are on the right track, then the reason why the proposed contextualist response does little better than the relativist response is simply because there is something amiss in this particular formulation. To explore this possibility, I ran an experiment similar to the one reported by Dinges and Zakkou. The relativist response was left unchanged; the contextualist one was modified. Take the *dislike-to-like* situation, where Yumble is not deemed tasty at the context of utterance, yet considered tasty at the context of assessment. Instead of following up "What I said was true" with a potentially confusing second sentence ("Still, Yumble is tasty"), it was followed with what a contextualist would provide as the rationale of their truth-assessment: "At the time, I didn't find Yumble tasty." The revised formulation thus mirrors the structure of the relativist statement ("What I said was false. Yumble is tasty."), in so far as here, too, the second sentence supports and explains the truth-assessment expressed by the first sentence of the response. In a nutshell, the revised design establishes parity between the two responses. Each of the responses points to the context that is deemed relevant for truth-evaluation according to the respective semantic view. The relativist response highlights the context of assessment, the contextualist one the context of utterance—and not something that simply does not play a role on that account.

3.1. Participants

A total of 294 participants were recruited via Amazon Mechanical Turk. The IP address was restricted to participants from the US. In line with the preregistered criteria,[6] 55 participants who failed an attention check, took less than 20 seconds to answer the main questions or whose native tongue was not English were excluded, leaving a sample of 239 participants (female: 51%; age M = 43 years, SD = 13 years, range: 20–76 years).

3.2. Methods and Materials

Participants read Dinges and Zakkou's Bubble Gum scenario (see Appendix). They were randomly assigned to either the *dislike-to-like* condition

or to the *like-to-dislike* condition. Following the original methodology, participants were asked how likely they were to respond with one of the following two claims (here reproduced for the *like-to-dislike* condition, the order was counterbalanced) on a scale of 0–100:

(i) [Relativist (unchanged)] "What I said was false. Yumble is tasty."
(ii) [Contextualist (revised)] "What I said was true. At the time I didn't find Yumble tasty."

3.3. Results

A mixed-design three-way ANOVA (Table 6.1) with *order of presentation* (relativist claim first v. second) and *direction of preference reversal* (dislike to like v. like to dislike) as between-subjects factors, and *assessment* (relativist v. contextualist) as within-subject factor revealed a significant effect of *assessment* ($F(1, 235) = 500.760$, $p < .001$, $\eta_p^2 = .681$, a large effect). All other factors, as well as all interactions were non-significant (all *ps* > .05). Figure 6.5 presents the results.

Given that the *direction of preference reversal* and the *direction*assessment* interaction were nonsignificant, there is no evidence for a direction effect of any sort. As is clearly visible from Figure 6.5, the results also testify against an *Even Split* result. Whereas in either direction of preference reversal the likelihood of giving the contextualist response exceeded 80% (and was significantly above the midpoint, one-sample *t*-tests, *ps* < .001), the likelihood of giving the relativist response was below 25% (significantly below the midpoint, one-sample *t*-tests, *ps* < .001). For both scenarios, the effect size of the difference between contextualist and relativist response was again large (Cohen's *d*s > 1.41).

Table 6.1 Mixed ANOVA for the likelihood of uttering a contextualist or relativist response.

IV	*DFn*	*DFd*	*F*	p	η_p^2
Order	1	235	1.691	0.195	0.007
Direction	1	235	< 0.001	0.975	< 0.001
Assessment	1	235	500.76	< 0.001*	0.681
Order*Direction	1	235	0.847	0.358	0.004
Order*Assessment	1	235	0.31	0.578	0.001
Direction*Assessment	1	235	0.068	0.795	< 0.001
Order*Direction*Assessment	1	235	0.019	0.890	< 0.001

Note: Within factor = response type, all other factors were manipulated between subjects.

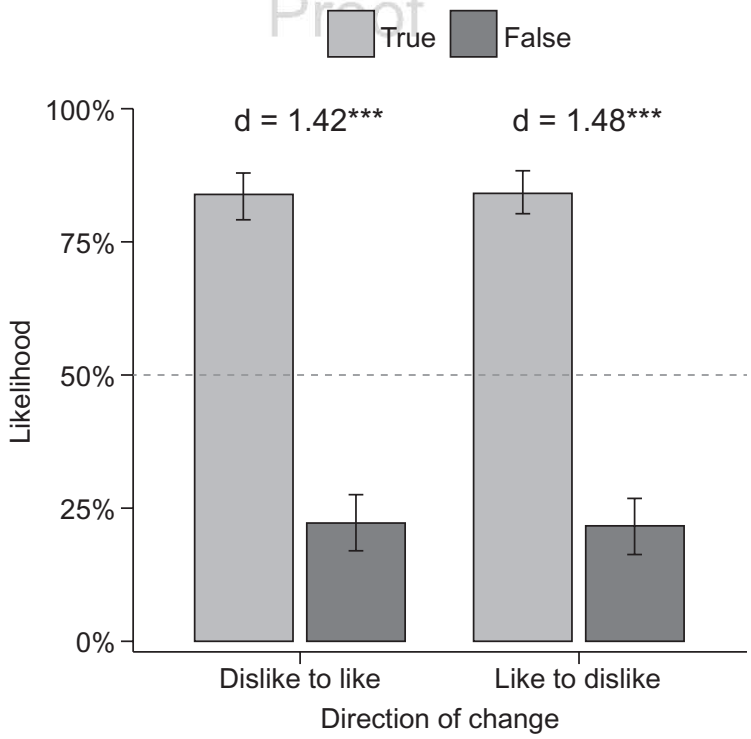

Figure 6.5 Likelihood of uttering a contextualist (true) response and a relativist (false) response across directions of preference reversal. Error bars denote 95% confidence intervals.

3.4. Discussion

Experiment 1 could not find support for the Even Split results reported by Dinges and Zakkou, according to which the likelihood of giving a contextualist and a relativist response sits somewhere around the midpoint. Instead, the findings indicate strong support for truth-assessment along contextualist lines, and they challenge truth-assessment along relativist lines. The effect size for the difference in likelihood across response types is very large (Cohen's *d*s > 1.42). What is more, truth assessment is unaffected by the direction of preference reversal. The nonsignificant direction*assessment interaction suggests that there is no direction effect.

One finding is particularly interesting: Although the relativist answer was *not* changed from Dinges and Zakkou's experiments, the reported mean likelihood of responding in that way dropped from about 50% in their experiments to less than 25% in the present experiment. As in every empirical experiment, this might just be an oddity in the data. However, it need not be: if it were true, as hypothesized, that the contextualist response sounds somewhat confusing or potentially contradictory in Dinges and Zakkou's experiments, it might be that the relativist response held more appeal *by comparison*.[7] Once the contextualist response is improved, the comparative appeal of the relativist response declines. To explore whether

the distaste for the relativist response replicates, I ran another experiment. So as to increase external validity, I switched to a forced-choice response mechanism where participants could select between the relativist response, the contextualist response, or neither.

4. The Even Split—Experiment 2

4.1. Participants

A total of 158 participants were recruited online via Amazon Mechanical Turk. Following the preregistered criteria,[8] 13 participants who failed an attention check or took less than 15 seconds to answer the main questions were excluded, leaving a sample of 145 participants (female: 47%; age M = 43 years, SD = 14 years, range: 22–75 years).

4.2. Methods and Materials

The scenario and the conditions were the same as in Experiment 1. Participants were randomly assigned to either the *like-to-dislike* or the *dislike-to-like* condition of the Bubble Gum scenario. This time, however, participants had to choose amongst three options: the contextualist response, the relativist response, or neither. In the dislike-to-like vignette, where Paul doesn't like Yumble at the context of utterance yet comes to like it later, for instance, the question read (labels in square brackets omitted):

Please tell us which of the following responses you'd be more likely to give to Paul (if any) in the given context:

> [Relativist] "What I said was false. Yumble is tasty."
> [Contextualist] "What I said was true. I didn't find Yumble tasty at the time."
> [Neither] "Neither."

4.3. Results

The results are graphically represented in Figure 6.6. As in the previous experiment, more than 3 in 4 participants opted for the contextualist response (as binomial tests show, significantly above chance—i.e. 33%, *ps* < .001, and significantly above the midpoint, *ps* < .001). Agreement with the relativist response was even less pronounced than in Experiment 1 and under 10% in either condition (significantly below chance and the midpoint, *ps* < .001).

The fact that hardly anyone opted for the option "neither response" (significantly below chance and the midpoint, *p*s < .001) suggests that people are happy with a contextualist response as proposed. Interestingly,

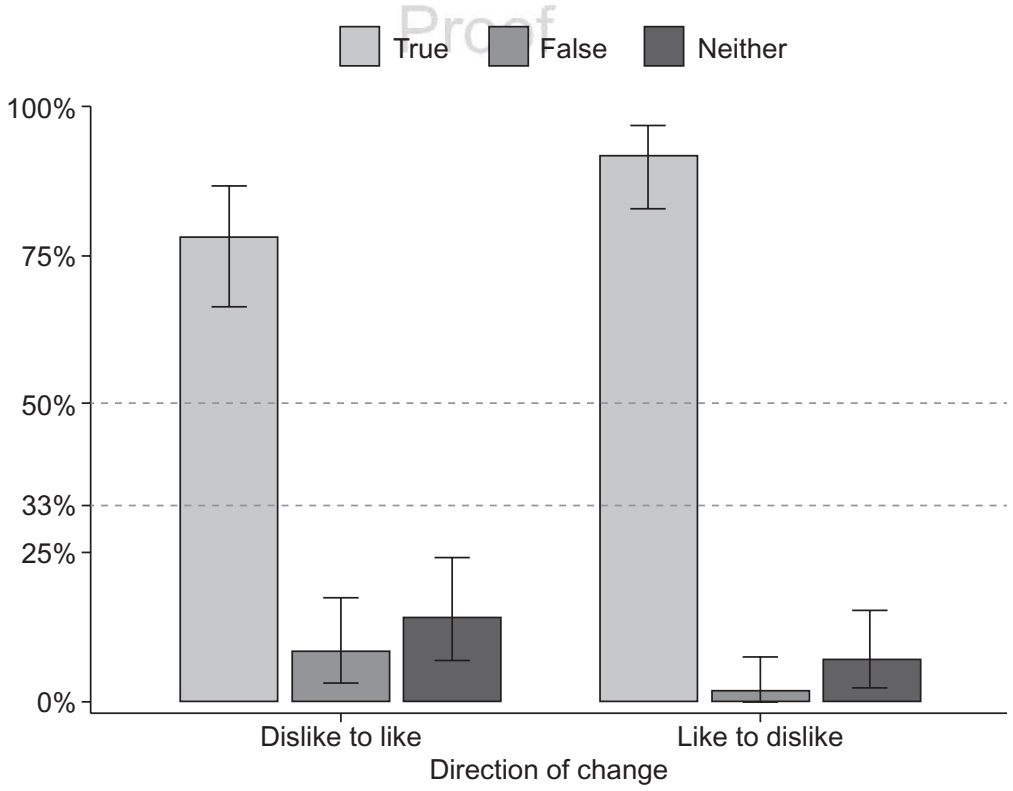

Figure 6.6 Proportion of responses (forced-choice) across direction of preference reversal. Error bars denote 95%-confidence intervals.

there is a bit of a direction effect this time: agreement with the contextualist response is somewhat more pronounced in the *like-to-dislike* condition than in the *dislike-to-like* condition, and vice versa for the relativist response; a Fisher's Exact Test revealed a significant effect for the direction of change ($p < .05$, Cramer's $V(2) = .21$). However, there is little reason to investigate this further: given that the effect size is once again small, yet this time goes in the *opposite* direction as in the original studies and is absent in Experiment 1, there simply does not seem much of a systematic phenomenon (and less of a pressing one given the absence of the Even Split effect).

4.4. Discussion

Consistent with the majority of results for taste predicates and epistemic modals in the empirical literature generally as well as the findings reported in Experiment 1, the second replication of Dinges and Zakkou's study also supports a contextualist semantics of perspectival claims. Note that, once again, we found strong evidence *against* relativism, although for the relativist response the *exact same formulation* was employed as in Dinges

and Zakkou's original studies. But if support for the unchanged relativist response drops away once a plausible contextualist response is available, the external validity of Dinges and Zakkou's results is in doubt.

5. The Even Split—Experiment 3

The majority of empirical findings concerning the truth assessment of perspectival claims support contextualist predictions and challenge relativist predictions. This pattern arises in experiments where the perspectival claim is simply specified as true or false without further details and participants are asked whether they agree or disagree with this evaluation. The previous two experiments have shown that the same pattern is found with likelihood-of-response judgements where the contextualist and relativist answers invoke those contexts that are of relevance for the respective positions—the context of utterance in the contextualist case and the context of assessment in the relativist case. The diverging findings of Dinges and Zakkou, I have argued, are explained by the fact that their contextualist response only makes mention of the context of assessment—a context that is irrelevant for contextualist truth assessment and thus triggers a sense of confusion. Once this is rectified, not only does the contextualist response receive pronounced support, but the unchanged relativist response is deemed inadequate.

In line with the suggestions of one of the editors—and in the hope of putting all remaining skepticism to rest—I have run a final experiment employing Dinges and Zakkou's methodology. In this version the contextualist and relativist response mention *both* the context of utterance *and* the context of assessment. To make the responses as intuitive as possible, the context deemed relevant by each of the two positions is mentioned first. So, in the *dislike-to-like* situation, where the speaker has said that Yumble is not tasty, the contextualist response is "What I said was true. At the time Yumble wasn't tasty to me [reference to C_u], although it's tasty to me now [reference to C_a]." The relativist response is "What I said was false. Yumble is tasty to me now [reference to C_a], although at the time it wasn't tasty to me [reference to C_u]."

5.1. Participants

A total of 262 participants were recruited online via Amazon Mechanical Turk. In line with the preregistered criteria,[9] 80 participants who failed an attention test, were not native speakers of the English language, or took less than 20 seconds to answer the main questions were excluded, leaving a sample of 182 participants (female: 46%; age M = 41 years, SD = 13 years, range: 20–91 years).

5.2. Methods and Materials

The scenario and the conditions were the same as in Experiment 1. Participants were randomly assigned to either the *like-to-dislike* or the *dislike-to-like* condition of the Bubble Gum scenario. On a scale of 0–100, participants again had to report how likely they were to give either of the two responses. This time the responses read:

Dislike to like

[Relativist] "What I said was false. Yumble is tasty to me now, although at the time it wasn't tasty to me."
[Contextualist] "What I said was true. At the time Yumble wasn't tasty to me, although it's tasty to me now."

Like to dislike

[Relativist] "What I said was false. Yumble is not tasty to me now, although at the time it was tasty to me."
[Contextualist] "What I said was true. At the time Yumble was tasty to me, although it's not tasty to me now."

5.3. Results

A mixed-design ANOVA with *direction of preference reversal* (dislike to like v. like to dislike) as between-subjects factor and *assessment* (relativist v. contextualist) as within-subjects factor revealed a significant effect of *assessment* ($F(1, 180) = 241.64$, $p < .001$, $\eta_p^2 = .573$, a large effect). *Direction of preference reversal* was nonsignificant ($p = .484$); the interaction was significant though the effect size was once again small ($F(1, 180) = 5.92$, $p = .016$, $\eta_p^2 = .032$). Figure 6.7 presents the results.

Consistent with the two previous experiments, the findings support contextualism and challenge relativism. In either direction of preference reversal the mean likelihood of giving the contextualist response exceeded 75% (significantly above the midpoint, one-sample *t*-tests, *ps* < .001). Consistent with the findings from Experiment 1 and 2 and inconsistent with Dinges and Zakkou's findings, the mean likelihood of responding with a relativist response was again very low (significantly below the midpoint, one sample *t*-tests, *ps* < .001). For both scenarios, the effect size of the difference between contextualist and relativist response was large (Cohen's *d*s > .97).

5.4. Discussion

Experiment 3 replicates the findings from Experiments 1 and 2 with different formulations of the responses. Overall, then, the results of the three

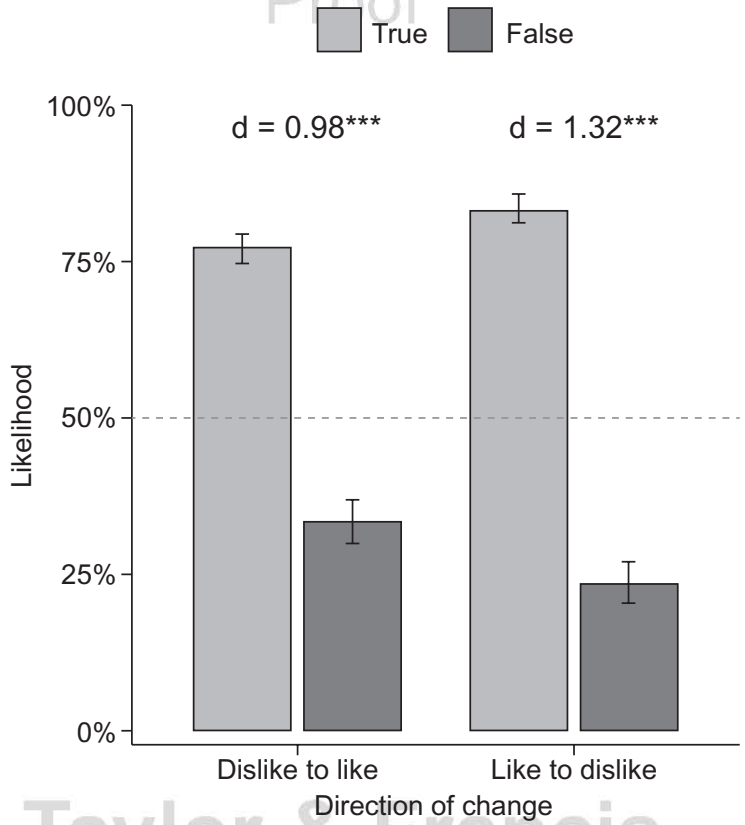

Figure 6.7 Likelihood of uttering a contextualist (true) and relativist (false) response across directions of preference reversal. Error bars denote standard error of the mean.

experiments with distinct formulations and designs constitute support for contextualist truth assessment. The results of all three experiments (two of which used the exact same prompt for the relativist response as Dinges and Zakkou's studies) cast doubt on the plausibility of relativist truth assessment. Given that, in total, about a dozen studies (differing with regards to scenario, type of perspectival claim, response mechanism, and language, cf. Knobe & Yalcin, 2014; Kneer, 2015, 2021a; Marques, ms) converge on the same pro-contextualist results, Dinges and Zakkou's diverging findings seem to be owed to an idiosyncrasy in design choices.

6. Retraction

Knobe and Yalcin (2014), we saw earlier (Section 2.4), report evidence supporting a retraction rule of sorts for epistemic modal claims whose prejacent is false at the context of assessment. Knobe (2021) has recently argued that similar behavior is to be expected in preference-reversal cases for taste claims. The evidence is surprising for two reasons: First, truth assessment of perspectival claims is near-uniformly sensitive to the context of utterance. Second (see Section 2.3), recent evidence suggests that

the norm of assertion (tout court) is *nonfactive*, so it would be odd in the extreme to find norms of retraction to be sensitive to propositional truth. In the following, I'd like to suggest that the astonishing findings are explained by the normative force invoked in the way Knobe and Yalcin formulated their retraction question.

6.1. Normative Force

Norms come in different kinds and flavours. On the one end of the spectrum concerning normative force, we find prescriptive norms (one *ought* to do x) and proscriptive norms (one *ought* not to do x). Strong norms, concerned with what one *ought*, *should*, or *must* do, contrast with weaker ones regarding what it is *appropriate* or *permissible* to do or what one *may* do. Whereas strong norms entail their weaker equivalent—what one should do must at least be appropriate or permissible—the reverse is not the case: The fact that doing *x* might be permissible or appropriate does not entail that one should or ought to do x. If doing *x* is permissible, it can also be permissible to refrain from doing *x*. If, however, one must or ought to do *x*, it is standardly inacceptable to not do *x*.

Philosophical accounts concerning norms of assertion standardly invoke strong force: In order to be in a position to assert that *x*, one "must" (Williamson, 2000) or "should" (Douven, 2006; Turri, 2013) fulfil certain epistemic conditions (be it knowledge, justified belief, or something else). Norms of retraction tend to be formulated in similar fashion. Dummett (1978, p. 20), for instance, writes that "[t]here's a well-defined consequence of an assertion proving incorrect [false], namely that the speaker *must withdraw* it." As quoted earlier, MacFarlane's *Reflexive Retraction Rule* states that "[a]n agent in context c_2 is *required to retract* an (unretracted) assertion of p made at c1 if p is not true as used at c_1 and assessed from c_2."

A potential reason why Knobe and Yalcin's findings in the Boston experiment (quoted earlier) differ strongly from the majority of results (including their own Experiment 3) is presumably this: rather than testing a prescriptive norm as to whether Sally, the speaker, is *required to retract* her epistemic modal claim whose prejacent is false at the context of assessment, they ask people whether "[i]t *would be appropriate* for Sally to take back what she said." It is, however, entirely possible for a retraction to be appropriate or permissible, without there being any *requirement* to take it back. In order to explore whether people would also be willing to impose such a requirement on Sally, I reran Knobe and Yalcin's experiment manipulating the formulation (also previously done in Kneer, 2015, ch. 6). In one version, the retraction question was left exactly as phrased by Knobe and Yalcin; the other asked whether Sally is "required to take back what she said."

6.2. Participants

A total of 196 participants were recruited online via Amazon Mechanical Turk. The IP address was restricted to the United States. Thirty-seven participants who failed an attention check or took less than 15 seconds to answer the main questions were excluded, leaving a sample of 159 participants (female: 44%; age M = 43 years, SD = 13 years, range: 23–76 years).

6.3. Methods and Materials

In a between-subjects experiment, participants were presented with Knobe and Yalcin's *Boston* vignette (see Section 2.2). There were two conditions: One used Knobe and Yalcin's original formulation of the retraction question invoking "appropriate . . . to take back" ($\text{Retraction}^{\text{Weak}}$). The other formulation ($\text{Retraction}^{\text{Strong}}$) followed MacFarlane's formulation of the reflexive retraction rule and asked whether Sally is "required to take back" what she said:

> [$\text{Retraction}^{\text{Weak}}$] It would be appropriate for Sally to take back what she said.
> [$\text{Retraction}^{\text{Strong}}$] Sally is required to take back what she said.

Participants were randomly assigned to one of the two conditions.

6.4. Results

The results are graphically represented in Figure 6.8. A one-way ANOVA (see Appendix) revealed a significant effect of formulation ("retraction appropriate" v. "retraction required"; $F(1, 157) = 56.11$, $p < .001$, $\eta_p^2 = .265$, a large effect). Agreement with the claims that it is *appropriate* for Sally to take back what she said was significantly above the midpoint (M = 5.75, $p < .001$), replicating the findings of Knobe and Yalcin. Agreement with the claim that Sally is *required* to take back what she said, however, was significantly *below* the midpoint (M = 3.41, $p = .020$),[10] replicating the findings from Kneer (2015, ms) and Marques (ms), who report similar findings for native Spanish speakers. The effect size of formulation was large (Cohen's $d = 1.19$).

6.5. Discussion

The results suggest that there is no requirement to retract an epistemic modal claim from a context of assessment at which its prejacent is known to be true. However, under certain circumstances (such as those of the

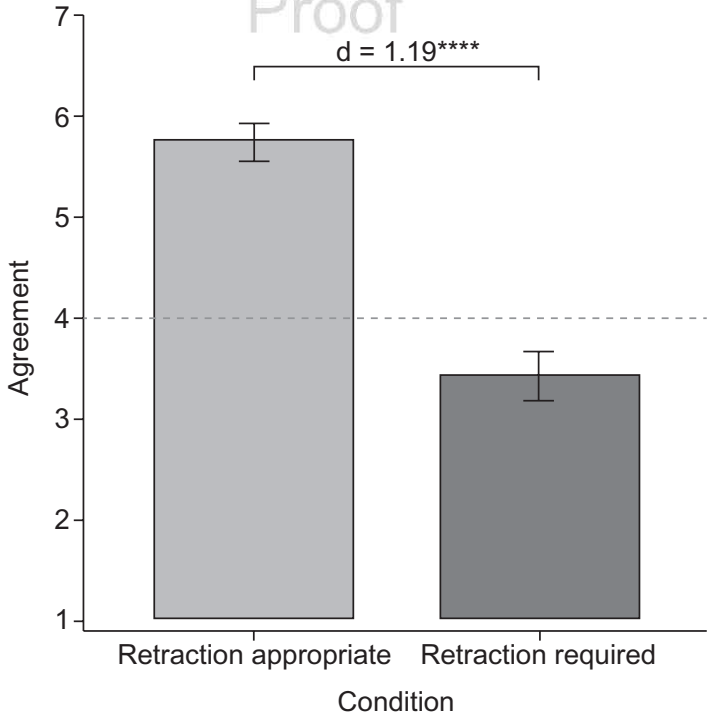

Figure 6.8 Agreement with proposed retraction across formulation ("retraction appropriate" v. "retraction required"). Error bars denote standard errors.

scenario) it is deemed nonetheless appropriate to do so. Knobe and Yalcin explain the latter finding thus:

> One possible approach would be to view retraction as a phenomenon whereby speakers are primarily indicating that they no longer want a conversational common ground incorporating the update associated with a sentence that they previously uttered. On this approach, *what is retracted* is a certain conversational update; retraction is in part a means of undoing or disowning the context change or update performed by a speech act.
>
> (2014, p. 17)

This conclusion dovetails nicely with some interesting observations by Khoo (2015), which served as inspiration for Knobe and Yalcin (for related discussion see also Khoo & Knobe, 2018). Much of the literature on disagreement, Khoo argues, makes the following assumption:

> Rejecting is contradicting: to reject an assertion just is to claim that what is asserted by it is false.
>
> (2015, p. 515)

This assumption, however, is misconceived. Although it's rather uncontroversial that, most times, in rejecting an assertion, one intends to flag it as false, this need not always be the case. Here are three examples:

A: Jim ate some of the cookies from last night.
B: No, he ate *all* of the cookies from last night.

(Khoo, 2015, p. 517)

A, B and C are sharing a flat and the kitchen tends to be a mess.
A: "I made B clean up the kitchen last night."
B: "No. You *asked* me to clean up the kitchen and I did it."

A and *B* are wondering whether the bank is open (it's a Saturday). *A* has just called a friend who told *A* that the bank was open last Saturday.

A: The bank is open today.
B: No, the bank *might* be open today. Banks are never open on national holidays, and we still don't know whether today is a national holiday.

(Khoo, 2015, p. 516)

As Grice (1989) observed, communication is not limited to *what is said* (the semantic content) but frequently revolves around *what is meant*, which includes conversational implicatures. In the first two examples, although *what is said* by A is true, B still has grounds to reject the assertions due to the fact that they carry certain objectionable implicature: That Jim ate *some but not all* of the cookies or that A had the *authority or power to force* B to clean up the kitchen. Concerning the third example and epistemic modals more generally, Khoo suggests what he calls the *Update Observation*:

> *The Update Observation*: generally, assertively uttering an epistemic possibility sentence involves proposing that it not be common ground that its prejacent is false. (Thus, generally, the communicative impact of assertively uttering an epistemic possibility sentence will involve the property of not having as a member the negation of its prejacent.)
>
> (2015, p. 528)

Whether we are, like Khoo or Knobe and Yalcin, inclined to invoke a Stalnakerian (1978, 1999, 2002) framework or else Grice's theory of implicature to explain rejections not aimed at the truth value of the proposition expressed doesn't matter much. What seems evident is that rejecting a claim can go beyond objecting to its alleged falsity. Instead, one might be objecting to certain implicatures it carries on its heels and/or to certain updates of the common ground it tends to engender.

I find the explanation of Khoo and Knobe and Yalcin deeply plausible. It sheds light on our communicative practices in general and the conversational move of retraction more particularly. Note, however, that data

as to what kinds of (nonrequired) moves in communication are appropriate, permissible, or commendable does not have any particular impact on the quest for a *constitutive* or *central* norm of assertion, and neither does it matter much for the contextualism/relativism debate. Assertion is governed by a plethora of peripheral rules (concerning clarity, precision, relevance, etc.), none of which can be expected to be core to the characterization of the practice itself. Moreover, the dispute between contextualists and relativists concerns the truth-conditional semantics of perspectival claims, and weak norms of retraction, just like other peripheral norms, simply do not matter for this debate. I would thus like to resist any suggestions that data of this sort, which is not predicted by any of the three main theories of perspectival claims, requires "amendments" of any kind (Khoo, 2015) or revive hope for (some version of) relativism (Beddor & Egan, 2018, § 4.1)—for the simple reason that said theories are justly mute on such questions.

7. Conclusion

The debate between contextualism and relativism revolves around two points of contention: *Truth assessment*, i.e. the question whether the extension of perspectival claims is assessment-sensitive on the one hand and whether such claims are governed by a *norm of retraction* on the other. The *content* of the contentious norm is to invoke propositional truth at the context of assessment, and its *force* is prescriptive (when appropriately challenged, one is *required* to retract a previous perspectival claim).

Consistent with the majority of findings from the empirical literature on perspectival claims, we have found that the truth assessment of taste claims is sensitive to features of the context of utterance and not to features of the context of assessment (Experiments 1–3). This invalidates the relativist position not only with regards to truth assessment itself but also with respect to a norm of retraction whose requirements allegedly track assessment-sensitive propositional truth. If the truth of perspectival claims is not assessment-sensitive, a situation in which MacFarlane's reflexive retraction rule takes grip can simply not arise. As argued, there are further, independent reasons to question said rule: Converging evidence from the empirical literature on the norm of assertion suggests that the latter is nonfactive and that one is warranted in asserting false beliefs for which one has good reasons. This suggests that norms of retraction are not tied to propositional truth of any sort. It would be odd if one were held to stricter normative standards for *retracting* a claim than for *asserting* it in the first place.

Given that the norm of assertion—and by extension the norm of retraction—is most likely not sensitive to propositional truth, and given that the truth of perspectival claims is not assessment-sensitive anyway,

the findings reported by Knobe and Yalcin might come as a surprise. Experiment 4 has shown that for their scenario, too, there is no *prescriptive* norm according to which one is *required* to retract an epistemic modal claim, whose prejacent turns out false at the context of assessment. People do, however, deem it *appropriate* to retract such a claim, in line with Knobe and Yalcin's original findings.

The retraction findings lend support to an explanation of the sort proposed by Khoo (2015) and Knobe and Yalcin (2014), according to which updating of the common ground can be effected due to reasons that go beyond propositional truth. Importantly though, norms of this sort simply do not bear on the discussion concerning a plausible *truth-conditional semantics* of perspectival claims (see also Marques, 2018, on this point). The kinds of norms that let us draw inferences about semantics are unlikely to be loose principles of guidance as to what it is permissible, commendable, or appropriate to say and do—if one so fancies. Rather, rules of this sort can be expected to carry strong normative force—they regulate what one is *required* to do or must do—just like the kinds of norms proposed by MacFarlane, which we found invalidated by the data.[11]

Notes

1. See *inter alia* Kölbel (2002, 2004, 2009), Lasersohn (2005, 2008, 2009, 2016), Glanzberg (2007, 2021), MacFarlane (2007, 2014), López de Sa (2007, 2015, this volume), Recanati (2007), Stojanovic (2007, 2017), Stephenson (2007), Sæbø (2009), Cappelen and Hawthorne (2009), Moltmann (2010), Barker (2010), Egan (2010), Sundell (2011), Schaffer (2011), Huvenes (2012), Pearson (2013, this volume), Kennedy (2013), Snyder (2013), Collins (2013), Plunkett and Sundell (2013), Marques and García-Carpintero (2014), Marques (2014a, 2014b, 2018), Clapp (2015), Ferrari (2015, 2016), Hîncu (2015), Zakkou (2015, 2019a, 2019b), Kneer (2015, 2021a, 2021c), Kennedy and Willer (2016), Zeman (2016a, 2016b, 2017, 2020), Dinges (2017a, 2017b, this volume), Kneer et al. (2017), Wyatt (2018, 2021, this volume), Kindermann (2019), Kaiser and Rudin (2020), Dinges and Zakkou (2020), Hîncu and Zeman (2021), Kaiser & Stojanovic (this volume), Rudolph (this volume), Willer & Kennedy (this volume).
2. See *inter alia* Kratzer (1977, 2012), Egan (2007, 2011), Stephenson (2007), Hawthorne (2007), von Fintel and Gillies (2008, 2011), MacFarlane (2010, 2011, 2014), Schaffer (2011), Dowell (2011, 2017), Swanson (2011), Willer (2013), Knobe and Yalcin (2014), Yanovich (2014, 2020), Khoo (2015), Kneer (2015, ms), Beddor and Egan (2018), Marushak (2018), Marushak and Shaw (2020).
3. See *inter alia* Schafer (2011), Kölbel (2016), McNally and Stojanovic (2017), Stojanovic (2016, 2017, 2018), Marques (2016), Liao and Meskin (2017), Cova et al. (2019), Collins (2021), Bonard et al. (this volume), Martínez Marín & Schellekens (this volume), Wallbank & Robson (this volume).
4. Personally, I am not particularly worried about the *Direction Effect*. Note that there are no main effects (neither response is significantly more or less favoured across directions of preference reversal), and the effect sizes of the interaction are small (Experiment 1: $\eta_p^2 = .025$, Experiment 2: $\eta_p^2 = .020$). Furthermore,

the main reason why the Direction Effect could be interesting is that it arises in conjunction with the Even Split Effect. However, the Even Split will be challenged in the experiments that follow. What is more, in the experiments reported in what follows the Direction Effect is sometimes absent and sometimes it goes in the *opposite* direction of what Dinges and Zakkou report. Given that the effect's size is always at best small and its direction capricious, there simply does not seem to be a robust phenomenon that requires explanation.

5. Dinges and Zakkou's design is motivated by a critique of extant studies (2020, p. 7), which apparently run the risk of a normative confound by asking questions as to whether it is "appropriate" (Knobe & Yalcin, 2014) to retract a certain claim or whether the speaker is "required" to do so (Kneer, 2015, 2021a, Marques, ms). On Dinges and Zakkou's view, such "permissibility-related judgments" might be sensitive to normative factors that go beyond linguistic rules (e.g. norms of morality or etiquette). But even if there were reason to be concerned about a normative confound (I do not quite see how morality or etiquette could interfere in the short scenarios about the gustatory merits of bubble gum or fish sticks) this argument seems to miss the mark: the criticized questions test norms of *retraction*, not *truth assessment*, which is the topic of Dinges and Zakkou. As regards the latter, the cited papers simply test *agreement* with a proposed truth-evaluation. It is not evident what kind of normative confound could be lurking here or why this tried-and-tested methodology needs revision.
6. https://aspredicted.org/J9F_7WW
7. As detailed, the two responses were judged independently. But given that they were presented on the same screen, it is perfectly plausible that the merits of each response were assessed with an eye to the alternative.
8. https://aspredicted.org/GP2_HCK
9. https://aspredicted.org/HJC_RP7
10. Advocates of relativism might sense hope in light of the fact that the mean is not that much below the midpoint (for arguments of this sort, see e.g. Beddor & Egan, 2018, § 4.1). Two points: *First*, what the relativist predicts is significant agreement with a required retraction claim, i.e. a mean rating that is not only somewhat below or nonsignificantly different from the midpoint but *significantly above* the midpoint. Differently put, she predicts means of the magnitude we find for the "appropriate" formulation of the retraction claim, and the effect size of the difference between the two formulations here is instructive: it's very large (d = 1.19). *Second*, the means of this particular experiment—such is the nature of empirical research—simply seem to be a little higher than in related studies. In Kneer (2015, Exp. 5) the mean retraction results for Knobe and Yalcin's scenario is M = 3.2 (SD = 2.2); Marques (ms, Exp. 1) reports near-identical results for English speakers and even lower means (M = 2.9) for native Spanish speakers (ms, Exp. 2). For a similar yet slightly different scenario (*China*, Kneer, 2015, Exp. 3) mean agreement with required retraction is considerably lower (M = 1.6, SD = 1.2).
11. For comments and help, I would like to thank Joshua Knobe, Teresa Marques, Neri Marsili, Marc-André Zehnder, and the editors. I do not want to imply that any of them agree with me. This work was supported by a Swiss National Science Foundation Grant (PZ00P1_179912).

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