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Fictional Persuasion, Transparency, and the Aim of Belief

In this paper we argue that some beliefs present a problem for the truth-aim teleological account of belief, according to which it is constitutive of belief that it is aimed at truth. We draw on empirical literature which shows that subjects form beliefs about the real world when they read fictional narratives, even when those narratives are presented as fiction, and subjects are warned that the narratives may contain falsehoods. We consider Nishi Shah's 'teleologist's dilemma' and a response to it from Steglich-Petersen which appeals to *weak truth regulation* as a feature common to all belief. We argue that beliefs from fiction indicate that there is not a basic level of truth regulation common to all beliefs, and thus the teleologist's dilemma remains.

We consider two objections to our argument. First, that the attitudes gained through reading fiction are not beliefs, and thus teleologists are not required to account for them in their theory. We respond to this concern by defending a doxastic account of the attitudes gained from fiction. Second, that these beliefs are in fact appropriately truth-aimed, insofar as readers form beliefs upon what they take to be author testimony. We respond to this concern by suggesting that the conditions under which one can form justified beliefs upon testimony are not met in the cases we discuss.

Lastly, we gesture towards a teleological account grounded in biological function, which is not vulnerable to our argument. We conclude that beliefs from fiction present a problem for the truth-aim teleological account of belief.

1. Beliefs from fiction

Here we give an overview of three experiments from the empirical literature showing that people acquire or change their beliefs about the real world upon engaging with fiction. Throughout the chapter we will use the term *beliefs from*

fiction to refer to the attitudes formed by participants of the experiments outlined below.

1.1 Transportation and belief change

Melanie Green and Timothy Brock investigated the effects of *transportation*, which is defined by them as ‘a distinct mental process, an integrative melding of attention, imagery, and feelings’ and hypothesized to be ‘a mechanism whereby narratives can affect beliefs’ (Green and Brock 2000: 701). They identify as a consequence of transportation that ‘parts of the world of origin become inaccessible [...] the reader loses access to some real-world facts in favor of accepting the narrative world that the author has created’ (Green and Brock 2000: 702). We focus here on the first of three experiments in which Green and Brock measured how participants’ beliefs were changed as a result of transportation into a narrative.

Participants read a story about a young girl who goes shopping with her sister and gets stabbed to death by a patient who has escaped from a psychiatric facility. Green and Brock devised a transportation scale which included eleven general items (e.g. ‘I was mentally involved in the narrative while reading it’) and four narrative specific items (e.g. ‘While reading the narrative I had a vivid image of Katie’), which were measured using a seven point scale from ‘very much’ to ‘not at all’ (Green and Brock 2000: 704). Green and Brock measured story-consistent beliefs—those whose contents were implications of the events in the narrative. Examples of such beliefs include ‘malls are not safe places’ (since that is where the murder occurred), ‘[psychiatric] patients should not be left unsupervised’ (since such a person committed the murder), and ‘the world is unjust’ (since the victim was an innocent child) (Green and Brock 2000: 705).

Participants were assigned to one of two conditions. In the fiction condition participants were told that the events in the narrative were part of a short story, and that ‘Resemblance to real persons and places is of course coincidental’ (Green and Brock 2000: 705). In the non-fiction condition

participants were told that the narrative came from a newspaper and was a journalistic account. The texts were the same in content, but differed in presentation, in order to reflect their purported fiction/non-fiction status.

Participants responded to story-related belief statements anchored by 'agree completely' and 'disagree completely', completed source manipulation checks (asked whether the story was fiction or nonfiction), and were given a recall test about story details to check whether they had read the story carefully.

The results showed that story source (whether it was labelled as fiction or non-fiction) did not affect reported levels of transportation, nor did it make a difference to the effect on the participants' beliefs after reading the narrative (Green and Brock 2000: 706). This result remained even when only looking at 'individuals who correctly recalled the truth status of the narrative [...] Fiction-nonfiction status did not affect transportation' or 'responses on the belief indexes' (Green and Brock 2000: 706).

Highly transported participants came away with beliefs in line with the story, and these results did not differ with respect to story source. Green and Brock note that 'Highly transported participants showed beliefs more consonant with story conclusions as well as more positive evaluations of the story protagonists', and they speculate that 'individuals altered their real-world beliefs in response to experiences in a story world' (Green and Brock 2000: 707).

One methodological worry about Green and Brock's experiment might be that the results are consistent with participants who already had story-consistent beliefs being more likely to experience higher levels of transportation into the narrative. Pre-empting this hypothesis, Green and Brock conducted another study with fifty participants, who filled in the story-related beliefs questionnaire, and then took part in the main experiment five to nine weeks later. Results indicated that 'initial beliefs were not a significant predictor of transportation' (Green and Brock 2000: 707). So those who already have story consistent beliefs are not more likely to experience higher levels of

transportation. Rather, those who experience higher levels of transportation, are more likely to have story consistent beliefs, regardless of story source.

Following this study, Green was interested in the relationship between transportation, perceived realism, and belief change. Perceived realism was understood as the perceived 'plausibility and realism of story events, settings, and characters' (Green 2004: 252). Transportation was manipulated allowing for 'a more direct test of the mediating role of perceived realism on the endorsement of story-relevant beliefs' (Green 2004: 250).

Participants read a 'first-person account of a gay man returning to his college fraternity for a reunion and encountering homophobia among current fraternity members' (Green 2004: 254). In the high transportation group participants were encouraged to 'relax and read the narrative as if you were leisurely reading a story in the comfort of your home' (Green 2004: 254-5). In the low transportation group participants were instructed to 'think carefully about the arguments, statements and beliefs the characters and settings seem to depict', and the control group received no instructions about reading style (Green 2004: 255). After reading, the participants reported on their transportation into the narrative, perceived realism, and gave responses to belief statements which were implied by the story, and information relating to their prior familiarity with the themes of the story (Green 2004: 253).

Transportation was measured using the same self-report scale as used in Green and Brock's experiment (2000), summarized above. Perceived realism was measured using a version of Elliott and colleagues' (1983) Perceived Plausibility Subscale of the Perceived Reality Scale. Questions were about how realistic and believable the story's characters, setting, and dialogue were, for example: 'People in this narrative are like people you or I might actually know' (Green 2004: 256).

Pre-reading instructions did not affect reported levels of transportation into the narrative but transportation was correlated with perceived realism—the more transported participants were, the more they felt that the events and characters of the story were believable. Implications of the narrative became

part of participants' real-world beliefs. Prior familiarity with story themes increased transportation, which was associated with greater perceptions of realism and endorsing more story-consistent beliefs (Green 2004: 260). This relationship between levels of transportation and endorsing story-consistent beliefs remained even when familiarity was controlled for (Green 2004: 263). Increased perceptions of realism were not related to story-consistent beliefs. Green suggests that this might show that perceived realism 'may be a side effect of transportation rather than the mechanism for affecting beliefs' (Green 2004: 263). So though there is a relationship between levels of transportation and endorsing story consistent beliefs, and though transportation is correlated with perceived realism, increased perceived realism *itself* is not related to story-consistent beliefs.

1.2 Warnings and belief change

In three experiments, Elizabeth J. Marsh and Lisa K. Fazio focused on whether pre-warnings or post-warnings made a difference to the effects of narratives on a test of general knowledge; for reasons of space, we discuss only their first experiment here. Participants read four stories which each contained eight references to facts taken from Nelson and Narens's (1980) general knowledge norms (four defined as 'high prior knowledge', answered correctly by 70% of Nelson and Narens's participants, and four defined as 'low prior knowledge', answered correctly by 15% of Nelson and Narens's participants). Half of the facts were framed correctly (providing the correct answer), and half were framed incorrectly, but plausibly (providing an incorrect answer). For example, consider the question 'What is the name of the navigation instrument used at sea to plot position by the stars?' The item as presented in the correct framing condition appeared as 'This here, this is a sextant and it's the main tool used at sea to navigate via the stars'. In the misleading condition it appeared as 'This here, this is a compass and it's the main tool used at sea to navigate via the stars' (Marsh and Fazio 2006: 1141). The participants completed a general knowledge test composed of ninety-six questions, sixty-

four of which were questions relating to story content, and thirty-two were filler questions.

Subjects in the warning-before condition were told that the stories they would read were fictional, and received the following warning (read out by the experimenter before the story-reading phase and printed on a piece of paper):

Authors of fiction often take liberties with certain facts or ideas in order to make the story flow better or be more entertaining. Therefore, some of the information you will read may be incorrect. (Marsh and Fazio 2006: 1142)

Subjects in the warning-after condition were told that the stories they read were fictional, and received the same warning, except in the past tense (i.e. 'some of the information you read may have been incorrect'), given before the general knowledge test.

Subjects were instructed not to guess in the general knowledge test. Warnings were found to have an effect: those subjects who were in either warning condition produced less errors in the general knowledge test. However, the errors reduced were not specifically errors which had been read in the story, and so there was not a reduction in *misinformation production* (defined as 'producing the specific incorrect answer that was presented in the stories' (Marsh and Fazio 2006: 1147)). So warnings did not reduce reliance on fiction.

In their discussion Marsh and Fazio note that across all experiments participants relied on fictional sources—as evidenced by their answers in general knowledge tests—despite experimental manipulations which were designed to reduce suggestibility (such as warnings) (Marsh and Fazio 2006: 1147). In their first experiment, discussed here, pre-warnings and post-warnings affected the overall amount of errors, but did not reduce story-specific errors (Marsh and Fazio 2006: 1147).

To sum up our overview of some of the empirical work on beliefs from fiction: Green and Brock (2000) were interested in the effects of transportation on real-world beliefs, with story source manipulations. They found that higher rates of transportation affected real-world beliefs, and knowing the source of the narrative (whether it was fiction or non-fiction) affected neither levels of transportation nor story-consistent beliefs. Following up on this work, Green (2004) was interested in the effect of familiarity and perceived realism on transportation and story-consistent beliefs. She found that transportation was correlated with higher perceived realism and familiarity, as well as endorsing more story-consistent beliefs. Finally, Marsh and Fazio investigated the effects of pre-read or post-read warnings on belief change. They found that warnings contributed to lower error rates overall but did not make a difference to story-specific errors.

Now that we have given a summary of some of the literature on generating attitudes from fiction, we turn to the teleological account of belief, for which such literature, we claim, presents a problem.

2. Transparency and the teleological account of belief

Philosophers have been interested in the best way to understand the connection between belief and truth, which is indicated by several features of belief. One such feature is transparency. Transparency is the fact that ‘when asking oneself *whether to believe that p*’ one must ‘immediately recognize that this question is settled by, and only by, answering the question *whether p is true*’ (Shah 2003: 447). Truth is not an optional end in deliberation over what to believe which provides an ‘*instrumental* or *extrinsic* reason that an agent may take or leave at will’ (Shah 2003: 447). If it were then the agent would have to make an inference from discovering that *p* is true and determining whether she ought to believe it, perhaps via what Shah calls a ‘bridge premise’ relating to whether or not it is good to have a true belief with respect to *p*. But ‘there is no such gap between the two questions within the first-personal deliberative

perspective; the question *whether to believe that p* seems to collapse into the question *whether p is true*' (Shah 2003: 447).

Transparency is not such that deliberative beliefs are formed exclusively via considerations relating to the truth of *p*, rather, it is just the fact that 'one cannot deliberatively, and in full awareness, let one's beliefs be guided by anything but truth' (Steglich-Petersen 2006: 503). This is not to say that *in fact* deliberative beliefs cannot be influenced by non-epistemic factors, rather, it is just that the deliberator cannot *take them* to be so influenced, first-personally, while deliberating. Provided that these non-epistemic factors are not acknowledged by the deliberator, transparency does not rule out their influencing the content or fixation of deliberative beliefs.

An account of belief should explain why the question *whether to believe that p* collapses into the question *whether p is true* in deliberation over what to believe. To explain why questions of the first kind collapse into, and are answered by, questions of the second kind, philosophers have adopted one of two strategies, broadly conceived. Normative theorists claim that we can explain transparency by appeal to a norm which governs belief: when a subject moves from the question *whether to believe that p* to the question *whether p is true*, she manifests her commitment to the truth norm (see for example Shah 2003, Shah and Velleman 2005).¹ We set this view aside and focus on teleological accounts in this chapter. Such accounts have it that belief is constitutively *aim* governed; here we discuss the *truth* aim teleological account. We focus on Steglich-Petersen's account because he has given the most attention to formulating it in a way which answers the teleologist's dilemma (outlined in the next section), which will concern us here.

The teleological account has it that 'believing that *p* essentially involves having as an aim to believe *p* truly' (Steglich-Petersen 2009: 395, our emphasis). The aim of belief is realised in one of two ways. In the *deliberative case* in which the subject deliberates over what to believe the aim is realised in

¹ One of us does not think that the explanation of Transparency offered by normative theorists works, though we do not argue that here (see Sullivan-Bissett *under review*; Sullivan-Bissett and Noordhof *under review*).

the subject's intentions *qua* a believer. In the *non-deliberative case* in which the subject does not deliberate over what to believe the aim is realised by 'some sub-intentional surrogate of such intentions in the form of truth-regulated [...] mechanisms' (Steglich-Petersen 2006: 510). Having the aim of truth is claimed to demarcate beliefs from other cognitive attitudes.²

It is by appeal to the aim of belief that teleologists explain transparency: when we deliberate over whether to believe some proposition *p*, transparency 'can be explained by the aim one necessarily adopts in posing that question, because the only considerations that could decide whether believing *p* would further that aim are considerations that bear on whether *p* is true'³ (Steglich-Petersen 2008: 546).

We turn now to the teleologist's dilemma which takes issue with this explanation.

3. The teleologist's dilemma

Shah argues that the teleologist finds herself on the horns of a dilemma in claiming that an aim to accept a truth is a necessary and sufficient condition for a state to count as a belief. This is because non-deliberative beliefs (those beliefs which are not formed as a result of our aiming to accept a truth, and which are not characterised by transparency) need to be accounted for by the teleologist.

The teleologist's story about these non-deliberative beliefs is that there are some mechanisms or dispositions which constitute aiming at the truth in the absence of the subject having a personal-level aim to believe truly. The issue is that whatever the teleologist has in mind in the case of sub-intentional mechanisms aiming at truth, it had better be the case that non-deliberative beliefs get through that net, since the account has it that all beliefs share the feature of being truth-aimed. Thinking in terms of *truth regulation*, understood as the amount of influence truth has in the fixation of belief, the teleologist

² Though we note that guessing might be aimed at truth (see Owens 2003).

³ One of us does not endorse this explanation for independent reasons (see Sullivan-Bissett *under review* for an argument against the teleological explanation of transparency).

might cast the truth regulation in the non-deliberative case as rather weak, since in some cases of non-deliberative belief, the role of truth played looks like a weak one (self-deceptive beliefs for example). However, the teleologist also needs to account for why, when one forms a deliberative belief (which is after all, just *one way* in which one can form a belief), truth is, by the agent's lights, the only relevant consideration for her, to the exclusion of all other considerations, in coming to a belief. To do this, the teleologist might understand the truth regulation secured by the aim as rather strong, but if she does this, she would find herself unable to account for those non-deliberative beliefs which look weakly regulated for truth (Shah 2003: 461-3). The challenge for the teleologist is to explain the deliberative case characterised by transparency, but to do this in a way which does not exclude non-deliberative beliefs, those not characterised by transparency, from qualifying as beliefs.

The problem is that the teleologist seeks to give an account of belief as being brought about through the aim of an agent or some sub-intentional surrogate of that aim, and this is supposed to be a demarcating feature of the attitude of belief. However, on the first horn, if she construes the disposition which constitutes aiming as quite strong (and perhaps she ought to do this in order to account for transparency), then she is unable to capture non-deliberative beliefs, which she claims are aimed at truth, albeit sub-intentionally. On the second horn, if she construes the truth-regulatory mechanisms or dispositions which constitute aiming in the non-deliberative case as rather weak (and perhaps she ought to since at least some beliefs look less strongly regulated for truth), then she is unable to explain the transparency which characterises deliberative belief formation, when we are aiming at truth at the agent level.

3.1 A teleological response to the dilemma

Steglich-Petersen responds to the teleologist's dilemma by claiming that what demarcates the attitude of belief is being regulated for truth, and such truth regulation is had in virtue of beliefs being aimed at truth. Steglich-Petersen

claims that *whether* a cognitive process is, de facto, weakly regulated for truth is independent of any aim of an agent. So, we can say that the attitudes resulting from processes of non-deliberative belief formation count as beliefs because the characteristic of weak truth regulation that they have is shared by cognitive states which have that very characteristic in virtue of their relation to aims of a believer (Steglich-Petersen 2006: 515).

This teleological response requires the truth regulation present in deliberative and non-deliberative belief formation to be the same, given that the claim is that such regulation is a feature which the two resulting attitudes share which classifies them all as beliefs. Prima facie, the regulation present in deliberative belief formation, the kind characterised by transparency to truth considerations, is rather strong. However, Steglich-Petersen notes that ‘even conscious doxastic deliberation is *de facto* merely weakly regulated for truth’ given an agent’s epistemic fallibility (Steglich-Petersen 2006: 511; Steglich-Petersen this volume). This is to say, when in the business of deliberating over *whether to believe that p*, we might take ourselves to be rather epistemically vigilant. However, given the possibility of failures of attention to appropriate evidence, motivational factors, and so on, our resulting beliefs are, as it turns out, only *weakly* regulated for truth.

The response to the dilemma is as follows: what demarcates beliefs from other attitudes is the descriptive characteristic of weak truth regulation, secured by the aim of truth. The strength of regulation is glossed in terms of how many non-truth factors are playing a role in the fixation of belief. Steglich-Petersen’s move is to say that in every case of belief—including those formed transparently—there are many non-truth related factors involved. The claim that all beliefs share the feature of weak truth regulation keeps the unity about belief, and gives a necessary and sufficient condition for something to be a belief. This is compatible with an explanation of transparency because as a matter of fact, there are many factors are involved in determining what one believes, but from the first-person perspective, one responds only to truth considerations.

Next we argue that beliefs from fiction put pressure on the claim that there is a regulatory feature shared by all beliefs which acts as a demarcating feature of them, and thus the challenge of the teleologist's dilemma remains.

4. Beliefs from fiction and the teleologist's dilemma

Here we draw on the material in section one to give a version of the dilemma which appeals to beliefs from fiction. We will argue that in light of this more particular version of the dilemma, the response offered to it by Steglich-Petersen is inadequate because beliefs from fiction tell against the claim that there is a basic level of truth regulation common to all beliefs.

The studies we looked at point to cases of belief where regulation for truth by the aim is rather poor. In Green and Brock's study we saw that if a reader is sufficiently engaged in a story, *even if it is presented as a fictional story*, 'they may show effects of the story on their real-world beliefs' (Green and Brock 2000: 701). Highly transported participants came away with beliefs in line with the story, and these results did not differ between the group in which the story was presented as a journalistic account, and the group in which the story was presented as fiction.

In Marsh and Fazio's experiment participants relied on fictional sources to answer questions on a general knowledge test, despite warnings. Though the warnings affected the overall amount of errors, they did not reduce story-specific errors. Subjects may have been more careful in general in answering questions on the test, but the warnings did not help subjects filter out or ignore information they had read in the fiction before the test.

These are cases in which, whether regulation for truth is secured by the personal level aim of the agent, or some sub-intentional surrogate of such an aim, such regulation is weaker than the regulation we see in at least some other cases of belief, most obviously, the deliberative case characterised by transparency. As Stacie Friend notes, studies on fictional persuasion show that 'we fail to scrutinize information when we are engaged with stories, making it more likely that we will accept and eventually believe what we read regardless of its veracity' (Friend 2013: 234). The findings from these studies

‘represent a pattern of belief formation and regulation that systematically fails to be truth-sensitive’ (Steglich-Petersen, this volume). Note that whether the beliefs from fiction identified in the experiments we cite are deliberative or non-deliberative beliefs does not affect our argument. If they are cases of non-deliberative belief, they plug into the teleologist’s dilemma rather neatly: they contrast with deliberative beliefs characterised by transparency, insofar as they are beliefs which require us to posit an even lower standard of regulation, distinct from Steglich-Petersen’s weak standard. If they are cases of deliberative belief, then, for example, for recall participants in Green and Brock’s study, we know though that even if the subject takes herself to be responding only to truth considerations, the transportative experience is such as to alter the product of the deliberation. We can say this because in the pre-experiments Green and Brock found that beliefs before reading the narrative were not a predictor of beliefs after reading the narrative, but transportation is (Green and Brock 2000: 707). Nor can we say that the belief change in these cases is because the subject’s evidence has changed, since in these experiments subjects are told that the account is fictional and thus, it cannot play the evidential role required for it to be the case that the subject’s evidence to have changed, in line with a basic level of truth regulation.

Perhaps the teleologist might say something like the following: when something is presented as fiction and a subject is transported, the subject is still aiming at truth. She takes it to be the case that some general proposition—in this case some proposition about the dangers of psychiatric patients—is true, and so forms a belief in the proposition. The compelling nature of the story *reveals the truth of the general proposition*. The subject is still aiming at truth, and her beliefs are weakly regulated for truth.⁴

This is problematic. It might be the case that the subject *takes it* that the compelling nature of the story reveals the truth of the general proposition, but she should not so take it. It is compatible with taking one’s beliefs to be very strongly regulated by truth when they are not. What we know about

⁴ Thanks to Paul Noordhof for suggesting this line of argument.

transportation provides reasons for thinking that subjects in such cases are not guided by truth: 'transportation into a story causes people to be less motivated (or less able) to disbelieve any particular conclusion; transported individuals are so absorbed in the story that they would likely be reluctant to stop and critically analyze propositions presented therein' (Green and Brock 2000: 703). The regulation for truth in this case of belief formation is weaker than in other cases (the non-transportative deliberative case, for example). The subject might *take herself* to be trying to form a true belief, insofar as that is what she thinks she is up to, but the strength of the truth regulation in such a case is weaker than non-transportative cases, and so puts pressure on the claim that the shared feature of weak truth regulation classifies this as a case of belief. It is not enough for the teleological account that the subject in the transportative case *takes herself* to be aiming at truth. This is because our point is one about a difference in degree: if we can demonstrate a difference in degree with respect to truth regulation for some cases of belief, then we have shown the implausibility of claiming a basic level of truth regulation common to all beliefs, which is supposed to be secured by the aim of truth posited by teleologists.

Beliefs from fiction are influenced by the transportative experience, and there is a difference in degree with respect to the truth regulation which goes on in such cases, and in the deliberative case where the subject is being careful. When people form beliefs upon engaging with fiction, *even when they are told that it is fiction*, there is a sense in which they should not be forming beliefs in such cases. But, we still want to call those resulting attitudes beliefs, how do we justify that? The teleologist has to say that it is because they share some basic level of truth regulation with other beliefs: beliefs from fiction share some feature with other beliefs grounded upon their being governed by an aim. This is the claim we want to resist.

It is no argument against the teleological account that beliefs from fiction are often false – this is consistent with truth regulation being weak (it is even consistent with truth regulation being strong!). What is important is that the

fixation of beliefs from fiction is influenced by non-epistemic factors, which suggests that the truth regulation present in this case is weaker than the truth regulation present in cases in which one deliberates and comes to a belief, without having been transported. Even if beliefs arising out of transportation are deliberative beliefs—so that having read the fiction, we ask somebody the question of whether they believe psychiatric patients present a danger, and they deliberate, and reasons for them being a danger are salient and so they form a belief—this is still a problem for the teleological account because the transportative experience has influenced the product of deliberation and produced a belief which is less strongly regulated for truth.

Recall that Green found that transportation was correlated with perceived realism and more story-consistent beliefs. One might think that perceived realism increased story-consistent beliefs in a way rather congenial to the teleological account. If subjects came away with story-consistent beliefs because they thought that the story was realistic, perhaps the story acted as a *reminder* or *signal* for how things are in the world. If I read a narrative and think that it is rather realistic, and it is because of the perceived realism that I go on to form beliefs which are consistent with the story, perhaps my beliefs are weakly regulated for truth. However, we saw that increased perceptions of realism were not related to story-consistent beliefs, suggesting that perceived realism may be an effect of transportation and not a mechanism for belief change (Green 2004: 263). The causal arrow goes from transportation to perceived realism, so the teleologist cannot claim that the correlation between perceived realism and story-consistent beliefs shows that perceived realism is an epistemically good, truth regulative way of gaining beliefs from fiction.

One worry about our strategy here is that we are pointing only to a difference in regulation in degree, and not in kind, and this is consistent with Steglich-Petersen's characterisation of the truth regulation being 'weak' in both cases. The beliefs gained from fiction and reproduced on questionnaires of beliefs and general knowledge tests might not be very well regulated for truth, but perhaps they do reach what might be a very low bar of *weak truth*

regulation. However, Steglich-Petersen himself is at pains to point out at the start of his response to the teleologist's dilemma that the regulation present in the deliberative case is *not* strong, objectively speaking, it is weak, a characteristic it shares with non-deliberative belief formation (Steglich-Petersen 2006: 511). If a difference in degree were not enough to make trouble for the teleologist, we would not expect Steglich-Petersen to worry about it when he articulates his response. So we take it that a difference in degree between the regulation present in some deliberative cases and the beliefs from fiction case is sufficient to cause problems for the teleological account. Though we can accept that regulation for truth in deliberation is weaker than it feels first personally, it is different from the truth regulation present in cases of belief from fiction which we have outlined here. One should also be aware that the weaker we go with respect to the truth regulation distinctive of belief, the less able we are to explain the seemingly strong truth regulation secured by transparency in the deliberative case.⁵

Let us briefly consider three possible models of fictional persuasion as outlined by Steglich-Petersen (this volume), to show that whichever model one adopts of what is going on in fictional persuasion, it is clear that weaker truth regulation is involved in the fixation of belief in such a context. . According to the *Gilbert Model*, drawing on the work of Dan Gilbert (1991) and colleagues (1993) beliefs can linger when we are prevented from weeding them out, and in cases of belief from fiction it might be that transportation is the mechanism for such prevention. If this is right, transportation prevents subjects from 'weeding out' beliefs that they otherwise would have, were they

⁵ Steglich-Petersen claims that we overestimate the de facto basic level of truth regulation, and that even in cases of deliberative beliefs it is very low—consider cases of bias or distraction, which nevertheless exhibit transparency (Steglich-Petersen this volume). He takes this point to support the claim that the level of truth regulation distinctive of belief is low enough that cases of belief from fiction pose no worry: even in cases of transparent deliberation we can have very poor regulation for truth. However, one might equally take the point to demonstrate that beliefs from fiction are just one of many cases that put pressure on the claim that there is a basic level of truth regulation common to all beliefs. And, as we note, the weaker the teleologist goes with respect to the level of truth regulation putatively distinctive of belief to accommodate such cases, the less plausible it looks that transparency can be explained by appeal to this regulation secured by a subject's aim to believe truly.

not transported, and this supports the claim that beliefs from fiction are less strongly regulated for truth than some other beliefs.

According to the *Availability Heuristic Model* as suggested by Anna Ichino and Gregory Currie (this volume), the availability heuristic is a mental shortcut which relies on the ease of cognitive retrieval when we make judgements about the probability of events. So, when participants engage with fiction, various examples of events, associations, and so on are made salient and so easy to retrieve. If this model is right then again, we have support for the claim that beliefs from fiction are less well regulated for truth—reading fiction makes salient items which then inform subsequent beliefs.

Finally, consider a model according to which fictional persuasion is an evolved cognitive process developed for information acquisition for foraging purposes (see Sugiyama 2001). According to this model we have evolved to be disposed to ‘take up beliefs when processing narrative’ (Steglich-Petersen, this volume). Once again, if this were the right explanation of fictional persuasion, it supports our claim that the truth regulation which goes on in these cases is at least different in degree from the regulation that goes on in at least some other belief formation.

To sum up our argument: the teleologist’s dilemma challenged the teleologist to give a descriptive account which both explained transparency and did not exclude non-deliberative beliefs from counting as beliefs. In response, Steglich-Petersen claimed that due to our epistemic fallibility, even beliefs from deliberation are only weakly regulated for truth, and this feature of weak truth regulation is shared by non-deliberative beliefs. Further, the reason we get to call these non-deliberative states *beliefs* on teleological grounds is because they share the feature of weak truth regulation with deliberative cognitive states which have that feature in virtue of their relation to intentional aims of a believer.

We claimed that beliefs from fiction are problematic for this line of response. This is because the fixation of belief in such cases is less well regulated for truth, and hence it is difficult to group all beliefs together by

appeal to the claim that they share some regulatory feature. It is thus implausible to suggest that the reason attitudes from fiction are *beliefs* is because they share some regulatory feature with other beliefs. We considered three models of fictional persuasion and suggested that on any one of them, regulation for truth comes out as weaker for cases of beliefs from fiction than at least some other cases of belief. If regulation of different strengths goes on, and it is by appeal to this truth regulation that we classify beliefs, then why count attitudes from fiction as beliefs if one is a teleologist? The case of beliefs from fiction then revives the teleologist's dilemma, and demonstrates that it is yet to be answered.

In the next two sections we consider two objections to our argument and offer responses to them.

5. Objection one: attitudes from transportation are not *beliefs*

One response to the challenge that putative beliefs from fiction pose to the teleological view is to claim that these attitudes are not instances of belief. People do not genuinely believe that, for example, *malls are dangerous places*, they just believe that *they believe that malls are dangerous places*.

On what basis can it be denied that people's responses to fiction are doxastic? Here are some options, based on how beliefs behave, or on the 'job description' usually attached to beliefs (Schwitzgebel 2001):

- (i) *Input* considerations: beliefs need to be based on evidence and attitudes from fiction are not. Fictional accounts are not always evidence for beliefs, even if people mistakenly take them to be.
- (ii) *Output* considerations: beliefs typically guide action and are predictive of people's future behaviour but attitudes from fiction do not guide action and are not predictive of people's future behaviour.
- (iii) *Rationality* constraints: beliefs are governed by norms of rationality. How to characterise such norms is controversial, but many philosophers who take beliefs to be governed by norms of rationality would take it that beliefs need to cohere with the person's other beliefs

(*procedural* rationality) and need to be responsive to evidence (*epistemic* rationality). Attitudes from fiction do not satisfy such criteria.

Is it a belief one reports when one says that *psychiatric patients who live in an institution should not be allowed to go out in the community during the day*, or asserts that *malls are dangerous places*, after being transported by a fictional text in which a crime is committed in a mall by someone who escaped a psychiatric institution? What is the alternative to seeing transportation as unduly influencing the formation of beliefs? How do we explain why people ascribe to themselves the belief that, for example, *malls are dangerous places* if they do not really believe it?

One explanation of the only apparent doxastic nature of attitudes from fiction is that people make a mistake when they attribute a belief to themselves (this is often called in other contexts a *metacognitive* account, see Currie (2000) for an influential version of this view as applied to delusional attitudes). Just because participants profess to believe that *malls are dangerous places*, it does not mean that they do in fact believe that. One possibility is that, when subjects profess to believe that *malls are dangerous places*, they mistake the state they are in (e.g., an emotional reaction or an act of imagination) for a belief.

There are two main concerns with this view, and good reasons to take these concerns seriously. The first is that the non-doxastic view about beliefs from fiction takes only some forms of behaviour as legitimate evidence for belief where the distinction between such forms of behaviour is questionable. The second concern is that, in order to be consistent, the non-doxastic view about attitudes from fiction needs to apply to other belief-like states that fail to satisfy conditions (i), (ii), and (iii), but that are commonly described as beliefs. This revisionist move might appeal to some (e.g. Ichino 2015) but has important implications for our notion of belief that should not be underestimated.

Let us start with the role of different forms of behaviour as evidence for belief claims. It would seem that whether people avoid malls six months after

asserting that they are dangerous places counts as evidence for their believing what they asserted (as the attitude has the expected predictive power). But when people respond to questioning in a sincere manner, reporting an attitude that they are able to defend with reasons, this does not count as evidence for their believing what they are reporting. Although people are of course fallible when they ascribe attitudes to themselves and others, refusing to take their verbal behaviour as evidence for their believing that *malls are dangerous places* is a move that needs to be strongly motivated. We cannot think of a strong motivation for this move.

Let us turn to the status of other attitudes that fail to satisfy the job description of beliefs. If we take it that an attitude needs to be based on evidence (*input* considerations), guide action and be predictive of future behaviour (*output* considerations), and obey procedural and epistemic norms (*rationality* considerations) in order to be a belief, we need to apply this set of constraints across the board and be prepared to develop non-doxastic accounts of many attitudes we routinely describe as beliefs. This may turn out to be a radically revisionist project given our current folk-psychological practices. Common instances of self-deception, superstitious beliefs, religious beliefs, prejudiced beliefs, and self-serving beliefs (to mention just a few types of attitudes) would have to be re-described, with the curious result that only *well-behaved* attitudes count as beliefs.

Another option for those who want to resist the idea that transportation directly contributes to the formation of *beliefs*, and that people genuinely *believe* what they assert after being exposed to, and transported by, fictional accounts, is to argue that the mental states of people affected by transportation start as emotional reactions or imaginings, and then *become* beliefs. This account would have to explain how the initial state gives rise to beliefs, but such an explanation may not be difficult to provide. Perhaps feeling a strong emotion or having imagined something to be the case disposes people to pay selective attention to evidence for a state of affairs, indirectly contributing to the formation of a belief. However, this line would not help the teleologist,

since it does nothing to suggest that the resulting beliefs are any better regulated for truth than they would be were transportation to play a more direct role in their formation.

A thorough examination of the debate would take more room than we can afford (for a more thorough defence of the doxastic nature of attitudes from fiction, see Buckwalter and Tullmann, this volume). Here, we are going to consider one issue that has been raised by Currie and Ichino (this volume) and Friend (2013: 238) concerning the doxastic nature of attitudes from fiction: that these cases do not involve beliefs because their reported attitudes lack *stability*:

one may ask how long-lasting these effects were; other experiments of this kind have found reversion to pre-test attitudes within days or hours, and readers' responses may have been indicative of temporary changes in mood rather than of belief changes. (Ichino and Currie, this volume)

The instability of such attitudes is something that would speak against both *output* considerations and *rationality* constraints, given that we expect a subject's beliefs (especially her general beliefs about how the world is likely to be) to be at the same time predictive of her behaviour and consistent with her other beliefs. If attitudes from fiction do not play the role of guiding the subject's future action, if they are dismissed before they can exert influence on behaviour, and if they are also inconsistent with beliefs she formed in an empirically adequate way, then maybe they are not worthy of belief status.

This line of argument is attractive as we tend to view beliefs as somewhat stable, but with stability we may be setting the bar too high for attitudes to count as beliefs. Why should we think that an attitude's stability is a condition for its being a belief? One issue is the vagueness of the notion of stability. How long should an attitude last and influence behaviour to be regarded as a genuine belief? Can one not form a belief and realise soon after (maybe in the space of the same conversation) that the belief was unfounded

and should be abandoned? There is no reason to rule out that beliefs can be updated and revised, even rejected, within a relatively short time. The requirement of stability for beliefs seems to clash oddly with the requirement of their revisability,⁶ and those endorsing stability need to provide a clear sense in which this notion demarcates beliefs from other mental states.

Let us assume that, for example, the attitudes reported after reading *Murder at the Mall*, are not stable and that in time participants come to abandon the idea that malls can be dangerous and that people diagnosed with psychiatric disorders should be locked up. We could take the fact that readers' attitudes from fiction do not survive as evidence that such attitudes were never beliefs, or instead, we could argue that the participants did form beliefs about the dangerousness of malls and then simply abandoned such beliefs at a later stage. Given that there is no reason to deny the possibility of belief change, the burden is on the non-doxasticist to motivate a preference for taking the participants to have *never having had the beliefs* over taking the participants to *no longer have the beliefs* or *having forgotten the grounds for the beliefs*.

The same choice presents itself in the case of other attitudes that seem to lack stability. The pattern of behaviour by the participants in Green and Brock's study is analogous to that of participants in the introspective effects literature. In a classic series of studies on dating couples (Seligman et al. 1980, Wilson and Kraft 1993), it was shown that attitudes about one's relationships, and predictions of the future of one's relationships, could be easily biased by changing the experimenter's style of questioning. Moreover, the attitudes manipulated in this way were shown to be 'fickle' and lack predictive power. Arguably, this case is analogous to the case of attitudes from fiction, because we could conceive of transportation as a way in which experimenters

⁶ Indeed, Steglich-Petersen argues that if attitudes from fiction are not stable, this feature of them shows that they are regulated for truth to the requisite degree to count as beliefs on the truth-aim account. Thus he makes the point that the truth-regulation required for a response to the teleologist's dilemma does not need to come at belief *formation*, but can come at the stage of belief *regulation* (Steglich-Petersen this volume). Instability then is used here to support the claim that these attitudes are indeed beliefs.

manipulate participants' attitudes. By eliciting transportation, experimenters dispose participants to report attitudes that are consistent with the fictional account, because of the vividness and accessibility of the fictional story.

In the dating couples' experiments, does the fact that the participants' actions *after* the study were not consistent with the attitudes avowed *during* the study suggest that such attitudes were not beliefs? Or does it suggest that in the following weeks participants changed their minds and no longer endorsed the attitude that they reported on the day of the experiment? Similar questions could be asked concerning the participants in Green and Brock's study, and indeed in the other studies overviewed in section one. Do they believe that *malls are dangerous places* during the study and then change their minds after the study? One explanation that could account for a change in attitudes in these cases relies on salience (see also Friend 2013: 239). Relevant information is made salient to participants at the time when they are first asked to report their attitudes, but is no longer salient at a later time when they are asked about their attitudes again, or when their relevant behaviour is observed. This effect of salience can be regarded as a mark of irrationality and as a source of biased judgement, but it does not rule out the possibility that people form *beliefs* as a result of manipulated information, and that these beliefs are then revised or rejected when such information stops being salient.

Our view then, is that the teleologist ought not respond to our objection by endorsing a non-doxastic position on attitudes from fiction.

6. Objection two: beliefs from transportation *are* truth aimed

Earlier we argued that beliefs from fiction do not share the feature of weak truth regulation with other beliefs, and so the teleological account is unable to classify these attitudes as beliefs. Here is the second objection to our argument: these beliefs *are* truth aimed because the subjects in these studies implement a general tendency to form beliefs based on testimony, and they take the narratives they read to include or constitute author testimony. If the participants in the studies we have looked at are exercising such a tendency –

and forming beliefs based on their trusting the author's testimony – perhaps their beliefs are aimed at truth, and share the feature of weak truth regulation with other beliefs.⁷

It is beyond the scope of this chapter to discuss the epistemology of testimony in any depth, and so we work through this objection to our argument without adopting any particular view thereof. For context, note that whilst reductionists about testimony require a testimonee to have non-testimony based evidence for a belief based on testimony to be justified, non-reductionists do not place this requirement on justification for testimony based beliefs. For our purposes what is important is that philosophers on both sides of this debate do require there *not* to be evidence which undermines the positive epistemic status of the belief (Stock this volume).

With this in mind, let us return to the objection. Could the teleologist say that the participants in the fictional persuasion experiments were implementing a tendency to form beliefs on the basis of testimony, and these beliefs are thus justified? And for argument's sake, let us say that if a belief is justified then it exhibits the basic level of truth regulation supposedly distinctive of belief on the teleological account. We think this is not, in fact, an option.

Though many epistemologists would agree that beliefs formed on the basis of testimony are justified ones, they would not think that this claim is applicable to the cases in question. As we saw earlier, as part of Green and Brock's experiments, subjects were assigned to one of two conditions: the fiction condition, or the non-fiction condition. The texts the subjects were asked to read were the same in content, but differed in how they were presented, in order to reflect their truth status. Importantly, 'These manipulations were not subtle; the information was provided in bold, double-spaced print on top of the first page of the narrative, and the narratives were formatted to reflect the alleged source' (Green and Brock 2000: 705). But this is not all, not only were the subjects provided with information as to the

⁷ We came across this line of response in an ancestor of Ichino and Currie (this volume).

supposed source of the text, they were also tested on this using source manipulation checks. In these checks ‘Participants were asked to indicate whether the story was fiction, nonfiction or “don’t know”’ (Green and Brock 2000: 706). Some participants failed this check, by either mistaking the story source or not knowing it. However, what is pertinent here is the fact that ‘even if only individuals who correctly recalled the truth status of the narrative [...] were considered, the basic pattern of results remained the same. Fiction-nonfiction status did not affect transportation’ (Green and Brock 2000: 706). Similarly, we saw that in Marsh and Fazio’s experiments, pre-warnings and post-warnings regarding the fictional status of the narrative read by participants did not make a difference to their use of fictional information to answer general knowledge questions.

So let us take the participants in Green and Brock’s fiction condition, or the participants in one of Marsh and Fazio’s warning conditions. If these participants formed their beliefs on the basis of (what they took to be) the author’s testimony, these beliefs would not be justified, since there is evidence which undermines the reliability of the putative testifier (i.e. the stories’ authors). In these cases, participants were told that the narratives they read were fictional, and so it would have been very easy indeed for the narrative’s author to have said something false, thus providing undermining evidence of the author’s testimony.

Given this, the teleologist cannot take the claim that beliefs formed on the basis of testimony are justified ones to ground the weak truth regulation for beliefs from fiction. Since those who think that beliefs based on testimony can be justified, would not take the cases we have looked to fall into that class.

It is not our argument that readers of fiction are *never* justified in forming beliefs via author testimony, or even that there is ‘an epistemic difference in kind between fiction and non-fiction’ (for an argument against this claim see Friend 2013, Stock this volume). Nor is it our argument that participants in these experiments were not justified in forming beliefs because of some fiction-specific feature (see Konrad this volume and Stock this volume for

discussion of cases in which readers are justified in forming beliefs when reading fiction). Rather, our claim is that, in *these experiments*⁸ participants would not be justified in forming beliefs upon what they take to be author testimony in the stories they read.

To sum up this section: to show that the objection does not work we noted that both reductionists and anti-reductionists in the epistemology of testimony require there to be an absence of evidence against the reliability of the testifier, for beliefs based on testimony to be justified. We claimed that given this requirement, weak truth regulation for beliefs based on fiction in this studies could not be based on a default assumption that beliefs based on testimony are justified. The difficulty the teleologist would face in trying to make a view about the reliability of testimony do this work arises in virtue of the fact that no proponent of the view that a general tendency to form one's beliefs upon testimony results in justified beliefs would think that this claim is applicable to the participants forming beliefs upon reading the fictional narratives in the studies we have discussed. This is because, reductivists and anti-reductivists alike, require an absence of evidence which speaks against the belief formed on the basis of testimony. In the empirical work we have discussed though, there is no such absence—participants are informed that the material they read is fictional, and may include falsehoods. Thus, if these participants really were exercising a tendency to form beliefs on the basis of testimony, such beliefs were not justified ones, and so it is not from these quarters that the teleologist can claim that such beliefs are, after all, aimed at truth.

7. Function based teleology

We will finish by gesturing towards a teleological account of belief which

⁸ An anti-reductionist about the justification of testimony might think that participants in the studies by Green and Brock (2000) and Green (2004) were in fact justified, since they were only told that the narrative was fictional, and if Stock and Konrad are right (this volume), that does not undermine their testimony imparting capabilities (though this will also depend on whether the conditions required for this are met in the narratives read). For those attracted to this line we restrict our conclusions in this section to the participants in Marsh and Fazio's (2006) study, who were warned that the narratives may contain false items.

does not run into the problems we have identified for the aim-based teleological account. One could understand belief's connection to truth by appeal to the biological functions of our mechanisms for belief production (see Millikan 1995a, 1995b, and for an explanation of transparency in these terms see Sullivan-Bissett *under review*). As Steglich-Petersen (this volume), the findings from studies on fictional persuasion do not undermine a teleological account of this kind. Such findings bring to light a pattern of belief formation which is not truth-sensitive, and so speak against the aim account of belief which makes a descriptive claim about all beliefs being weakly regulated for truth. However, false beliefs, even a *pattern of false beliefs*, do not constitute a counterexample to the claim that the biological function of our mechanisms of belief production is to produce true beliefs. This is because functions can fail to be performed. On a historical view of function at least (the view accepted by proponents of this account of belief), something possesses a function because *in certain key moments*, the performance of it contributed to the reproductive success of its bearers. So even though beliefs from fiction represent a group of beliefs which are insensitive—or at least, *less* sensitive—to truth, this does not speak against a teleological account of belief grounded in function. Beliefs from fiction are just ones which do not function very well, they do not do *what they are supposed to do* (unless one adopts Sugiyama's account outlined in section 4). These beliefs though do, as we have argued, speak against an aim-based teleological account which places a descriptive condition on belief in terms of truth regulation.

8. Conclusions

We began by giving an overview of some of the empirical literature which shows that subjects form beliefs upon reading fiction, even when the stories are presented *as* fiction, and even when the subjects are warned that the fictions they will or have read may contain falsehoods. Next we outlined the phenomenon of transparency which characterises our deliberative belief formation and requires an explanation from belief theorists. We discussed the

teleological account of belief and its explanation of transparency. Then we described Shah's challenge to the teleological account, the teleologist's dilemma. We outlined a response to the dilemma from Steglich-Petersen which had it that all beliefs are *weakly regulated for truth*. We then argued that beliefs from fiction show that this response to the dilemma is inadequate.

We considered two objections to our argument. The first was to take a non-doxastic approach to the attitudes gained from reading fiction. If such attitudes are not beliefs, the teleological account would not have to give an account of them. We responded to this objection by arguing for a doxastic reading of these attitudes, showing that they do indeed come under the teleological theorist's remit. The second objection was that readers in the experiments we discuss were treating the narratives as a source of testimony, and given beliefs based on testimony are justified, they were forming beliefs in an epistemically respectable way, and, more to the point, their beliefs were aimed at truth, and shared the feature of weak truth regulation with other beliefs. We responded to this by pointing out that the claim that beliefs based on testimony are justified is not applicable to the cases under discussion, since in such cases there is undermining evidence for the testimony. Finally, we noted that not all teleological views will be vulnerable to our argument, in particular, a biological function view about the connection between belief and truth will not struggle to accommodate beliefs from fiction. The aim account though is vulnerable because it places a condition on belief which is supposed to both explain transparency and demarcate belief from other attitudes.

We conclude then that beliefs from fiction present a revival of the teleologist's dilemma, which thus remains unanswered.

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