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Morality and the imagination: Real-world moral beliefs interfere with imagining fictional content

Jessica E. Black and Jennifer L. Barnes

University of Oklahoma, Norman, USA

ABSTRACT

The purpose of this paper was to test whether imaginative resistance – a term used in the philosophical literature to describe the reluctance to imagine counter-moral worlds – is experienced by people when they are asked to do something rather than just imagine it. Prior research suggests that people find it more difficult to imagine morally deviant worlds. Here, in a within-subjects design, we asked participants to describe in writing morally deviant, dystopian, and fantastical worlds; tell us if they had successfully completed the task, and if not, why not; and report how easy it was for them to imagine the fictional world. Despite producing more words in the morally deviant condition, participants were more likely to believe they had failed to describe a world in which the prescribed scenario was true. Associations between creativity, moral identity, need for cognition, disgust sensitivity, and personality and task performance were explored.

1. Introduction

Recent research (Black & Barnes, 2017; Kim et al., 2018) has addressed the phenomenon of "imaginative resistance," described in the philosophical literature as a perceived inability to imaginatively engage with certain fictional worlds, particularly immoral ones (Gendler, 2000, 2006; Walton, 1994; Yablo, 2009). The classic example of a scenario likely to provoke imaginative resistance is the following: "In killing her baby, Giselda did the right thing, after all it was a girl" (Gendler, 2000; Walton, 1994). Although it may be relatively easy to imagine a fictional world in which a mother kills her baby, it is difficult to believe that this could be the right thing to do. Philosophical debate about the nature of imaginative resistance has covered different topics, such as the importance of context (e.g., Stock, 2005; Todd, 2009); whether, in the case of morally repugnant fictions, imaginative resistance is caused by unwillingness or inability (cf., Currie & Ravenscroft, 2002; Gendler, 2006; Stock, 2005; Weinberg & Meskin, 2006); and whether, in fact, morality plays the key role in limiting imagination.

CONTACT Jessica E. Black ✉ jessicablack.universityacct@gmail.com 🏛 University of Oklahoma, Norman, USA

Whereas most treatments of imaginative resistance suggest that it arises primarily in response to immoral fictions (e.g., Driver, 2008; Gendler, 2000; Levy, 2005; Weinberg & Meskin, 2006), some philosophers hold that people also refuse to believe in other imaginary worlds, such as those that challenge common understandings of esthetics (Yablo, 2009; see Kim et al., 2018) and logic (Weatherson, 2004). Gendler (2006) holds that resistance to fictions that do not violate moral norms is due to lack of context; however, other philosophers believe that resistance to morally deviant fictions would also disappear given sufficient context (Stock, 2005; Todd, 2009). If the author describes her fictional world skillfully, readers should not resist immoral claims. For example, in the context of a society where female toddlers were ritualistically tortured, Giselda killing her baby to save her from that fate might indeed be "the right thing to do" and thus not cause imaginative resistance.

In contrast, Levy (2005) characterizes imaginative resistance as the product of the authority-independent nature of morality: an author cannot simply decide that morality works differently in her fiction because she does not have the authority to do so, regardless of the kind of context she provides (see also Weatherson, 2004). Notably, although empirical research suggests that people do tend to have trouble imagining morally deviant stories, there are both individual differences and scenario-specific differences in the degree to which morally deviant fictions provoke imaginative resistance (e.g., Barnes & Black, 2016; Black & Barnes, 2017; Liao et al., 2014). In some cases, resistance may be reduced thanks to the context provided (e.g., Liao et al., 2014); in other cases, participants presented with identical context may experience vastly different degrees of imaginative resistance to morally deviant scenarios, with some participants reporting that they are completely unable to imagine the morally deviant world, while others report that they can do so with ease (Barnes & Black, 2016; Black & Barnes, 2017). However, all previous empirical work on imaginative resistance has either asked participants to report on their tendency to experience resistance to morally deviant fictions in general (Black & Barnes, 2017), or it has presented participants with written scenarios and measured the degree to which participants were able to go along with the author's description and imagine the world described (e.g., Barnes & Black, 2016; Liao et al., 2014). The extent to which participants actually engaged in imaginative effort was unknown; there is no way of knowing whether participants tried and could not imagine, or if they simply refused to engage with the task. Thus, prior work has confounded the participants' ability with their willingness to imagine morally deviant worlds, and with the authority (or lack thereof) of the author, as well as the quality of and amount of context provided.

Here, we addressed the issues of authorship and context by removing the author from the equation and asking participants to produce the

context themselves by describing different imaginary worlds (immoral, dystopian, and fantastical) in their own words. If imaginative resistance arises due to conflicts with the author (for example, lack of context or refusal to recognize the author's right to dictate the content of her story; see Gendler, 2006; Matravers, 2003; Stock, 2005), then asking people to be the author of a fictional world should dramatically decrease imaginative resistance for all types of story worlds. If, on the other hand, imaginative resistance is caused by the immutable nature of morality, then participants would still report more difficulty imagining an immoral world.

In line with the theory that morality, rather than authority, is at the root of imaginative resistance, research on modal cognition suggests that there may be something challenging about imagining immoral actions. Phillips and Cushman (2017) asked participants to read realistic scenarios where something goes wrong (such as a car breaking down) and presented them with a series of possible events that would solve the problem. The events were either ordinary, improbable, impossible, immoral, or irrational. Participants indicated whether each event was possible or impossible. When participants were given time to reflect, they generally found immoral actions to be possible rather than impossible, but under time pressure, they were significantly more likely to judge them as impossible (this was also true to a lesser extent for irrational events; time pressure made no difference for ordinary or improbable events). Thus, it seems that recognizing that the immoral is possible may sometimes require overriding a more automatic appraisal that says it is not.

In the current study, we asked participants to consider the Giselda scenario referenced above ("In killing her baby, Giselda did the right thing; after all, it was a girl."). We then instructed them to describe a world in which that statement was true to the best of their ability. For contrast, participants also described two additional fictional worlds, one that suggested a dystopian future and one that was clearly fantastical. After describing each world, participants were asked if, in the world they had just described, the contents of the initial proposition they had been given were indeed true. They were also asked to rate how easy it had been for them to imagine such a world. Finally, participants completed self-report measures of personality, creativity, moral identity, disgust sensitivity, and need for cognition. Our purpose was to investigate the association of individual differences in these potentially related variables (Black & Barnes, 2017) with imaginative resistance as it has been operationalized here, and to examine the role that they might play in successful completion of the task.

2. Hypotheses

Based on past research (Barnes & Black, 2016; Phillips & Cushman, 2017), we hypothesized that participants would find it more difficult to imagine the morally deviant world than the other two worlds. Although it could be that creating the fictional world would increase imaginability compared with prior research (Black & Barnes, 2017), this would also be the case for the other two scenarios. At the same time, by asking participants to author their own version of each world, the current experiment examined the degree to which imaginative resistance exists independently of the author. If resistance to the author's role in creating a fictional world – whether due to writing ability, insufficient context, lack of trust in the author, or misunderstanding of the author's intent – is at the root of imaginative resistance, then having participants describe the fictional world should remove imaginative resistance to it. If imaginative resistance arises independently of the author due to the nature of morality – for example, because morality is authority-independent (Levy, 2005), because immersion in a morally deviant world represents a threat of moral contagion (Black & Barnes, 2017), or because moral cognition simply operates differently (Phillips & Cushman, 2017) – then putting the participant in the role of the author is not going to eliminate resistance to imagining morally deviant worlds. Participants, after creating a written description of a morally deviant world, may nonetheless insist that morality does not actually operate differently in the world they have described.

A secondary purpose of the current research was to explore the individual differences found in prior studies of imaginative resistance (e.g., Barnes & Black, 2016; Black & Barnes, 2017). To the extent that such individual differences are still seen when participants are put in the role of the author, we examine the role that variables such as creativity, need for cognition, personality, moral identity, and disgust sensitivity may play in causing these differences. We hypothesized that individuals who said that they had successfully described a world in which Giselda killing her baby was the right thing to do would show a different pattern of traits than those who, after creating a written description of such a world, nonetheless insisted that Giselda had not done the right thing. For example, we predicted positive correlations between creativity and successful imagining of all the scenarios, including the morally deviant ones: presumably, creative people would find it easier to imagine worlds that differ from our own, such as those in which morality or the laws of physics work differently. Thus, we predicted higher 'creativity' scores for those who answered "yes" to the question of whether the prompts were true in the worlds they had described, as well as a correlation between creativity and participants' self-reports of how easy they found it, overall, to imagine the scenarios.

Past research has shown imaginative resistance to be positively correlated with greater disgust sensitivity and moral identity (Black & Barnes, 2017); as such, we also predicted higher scores on our measures of moral identity and disgust sensitivity for "no" responders. Given that disgust sensitivity is also negatively associated with openness to experience and agreeableness (Inbar et al., 2012), we also expected the "yes" responders to have higher scores in the personality factors 'openness to experience' and 'agreeableness'. We made no hypotheses regarding the remaining Big 5 factors ('conscientiousness', 'extraversion', and 'neuroticism') or mean differences on 'need for cognition', but we expected participants with greater 'need for cognition' to report finding it easier to imagine all three scenarios: the challenge of describing such imaginary worlds should appeal to people who enjoy mental stimulation, resulting in increased imaginary effort and more successful descriptions.

3. Method

3.1. Participants and procedure

Two hundred and forty-four college undergraduates (70.5% female, 95% under 21) completed this study as part of an online survey offered through the psychology department's research participation pool.[1] They were awarded class credit for taking part in the research. After giving the participants a sample scenario and response (available at https://osf.io/z7w4q/), we presented them with three separate writing prompts (one-line scenarios described below) in random order, and we instructed them to do the following: "Please take a moment to imagine a fictional world in which the above statement is true. Think about the kind of world in which it would be true. When you are ready, please describe that world to the best of your ability." Before the participants completed the task, they were given an example. After they described each world, participants continued to the next page, where they were asked if, in the world they had described, the initial scenario (prompt) was in fact true. If they answered "no," they were redirected to a new page where they were asked, "Why not?" Finally, they were asked how easy it had been to imagine each world. After completing the writing tasks, participants responded to several self-report questionnaires, described below. (See supplementary materials for more details.)

3.2. Writing prompts

The morally deviant writing prompt has been offered by philosophers (e.g., Gendler, 2000; Walton, 1994) as an example of a scenario likely to cause imaginative resistance: "In killing her baby, Giselda did the right thing; after

all, it was a girl." For the dystopian scenario, we chose an example offered by Mahtani (2012) as unlikely to cause imaginative resistance and categorized by Barnes and Black (2016) as "factually unlikely" (as opposed to impossible): "By the year 2020, packs of wolves were roaming the towns of England." Barnes and Black reported that participants found this scenario much easier to imagine than the Giselda scenario mentioned above. Given the proliferation of popular dystopian films and novels, participants should have little trouble describing such a world. As with the Giselda scenario, they were asked specifically whether the statement was true in the world they had described: "In the world you described, is it true that wolves were roaming the towns of England?" For the fantastical scenario, a one-line scenario used by Barnes and Black (2016) was adopted: "Carlos and Stacy made sure the dragons were properly fed before riding them." This scenario gave participants the opportunity to freely imagine a fantasy world at a clear distance from the real one. Past research suggests that in distal worlds, we apply different moral rules (Roskies & Nichols, 2008), making imaginative resistance to such worlds unlikely.

3.3. Word count

An added benefit of asking participants to write their own descriptions of the fictional worlds is that we can gauge their effort by measuring word count. Presumably, those who wrote more were engaging more fully with the task and exerting more effort. If those who wrote extensively still exhibited imaginative resistance (by answering "no" to the "truth" question; see below), then we could assume that, at least in these cases, resistance was not due to unwillingness to engage with the task (see Gendler & Liao, 2016).

4. Operationalizing imagination resistance

We measured imaginative resistance in two ways. First, we tested whether participants believed that they had in fact created a morally deviant world: after they had described "a fictional world in which [that] statement was true" to their satisfaction, they were asked, "In the world you described, is it true that Giselda's killing her baby was the right thing to do?" ('truth' variable; see Kim et al., 2018). Participants answered by choosing, "Yes/no, in the world I described, Giselda did/did not do the right thing when she killed her baby." "No" answers, independently of what was written, would indicate imaginative resistance. Second, we used ratings of ease of imagining (see Black & Barnes, 2017): after the writing task, the yes/no question described above, and its corresponding explanation ("Why not?", allowing an open-ended response), participants were asked, "How easy was it for you

to imagine that world?", and they responded by pulling a slider from zero (*very difficult to imagine*) to 100 (*very easy to imagine*).

4.1. Instrumentation

4.1.1. Big five inventory

John et al.'s (2008) (see also John et al., 1991) 44-item Big Five Inventory (BFI) was used to assess the personality traits of 'openness to experience', 'conscientiousness', 'neuroticism', 'extraversion', and 'agreeableness'. Each of the five personality factors is presented by eight to ten items; participants are asked whether they agree with the 44 statements (all of which begin with "I am someone who … ") on a 5-point Likert scale. Internal consistency reliability ranged from r_α =.75 for 'conscientiousness' to r_α = .86 for 'extraversion'.

4.1.2. Moral identity

The 20-item Moral Identity Questionnaire (MIQ; Black & Reynolds, 2016) assessed two important aspects of moral identity: integrity and moral self, or the extent to which morality is seen as part of self-identity. Answer choices are on a 6-point Likert-type scale (*strongly disagree* to *strongly agree*) and coded in the direction of greater integrity and sense of moral self. Sample items include "I want other people to know they can rely on me," and "It is more important that people think you are honest than that you be honest" (reverse coded). Internal consistency was r_α = .92 in this study.

4.1.3. Disgust sensitivity

The Disgust Scale (DS; Haidt, McCauley, & Rozin, 1994; modified by Olatunji et al., 2007) was used to gauge participants' reactions to disgusting scenarios. The 25-item scale contains two sections, one of which asks participants to indicate their agreement with thirteen statements such as "It would bother me tremendously to touch a dead body" on a 5-point Likert scale. The second section asks participants to indicate how disgusting they would find a series of items such as "You accidentally touch the ashes of a person who has been cremated" by rating them on a five-point scale (*not disgusting at all* to *extremely disgusting*). Cronbach's alpha was r_α = .87 in this study.

4.1.4. Creativity

Hocevar's (1980) Creative Behavior Inventory (CBI) was used to assess creativity. The CBI includes 6 indices intended to measure creativity in art, crafts, performing arts, math and science, literature, and music. Sample items include "How often have you … worked as an editor for a newspaper or similar organization/painted an original picture/written an original computer program." We used the total score (r_α = .95) in our analyses.

4.1.5. Need for cognition

The Need for Cognition Scale (NCS; Cacioppo & Petty, 1982) is an 18-item instrument that assesses trait preferences for activities that involve cognitive challenge. People who score high on the NCS enjoy thinking and problem-solving; they feel comfortable with organizing and interpreting information. Items such as "I would prefer complex to simple problems" and "I only think as hard as I have to" are rated on a 5-point scale (*extremely uncharacteristic of me* to *extremely characteristic of me*). Internal consistency was $r_\alpha = .87$ in this study.

4.1.6. Data analyses

Because we used a within-subjects design, Cochran's Q was used to test for differences in responding (yes/no) across scenarios. McNemar's test was used for pair-wise comparisons between scenarios. Similarly, Repeated Measures ANOVA was used to test for differences across types of worlds for ease of imagining and word count. Pearson's r was used to calculate zero-order correlations. Independent samples t-tests were used to test for mean differences between those who answered "yes" and those who answered "no" when asked if the sentence is true in the world they described. Alpha level was set at $p < .05$ for all hypotheses. Continuous variables that were not normally distributed were transformed prior to correlational analyses. All three word count variables and 'creativity' were positively skewed: a logarithmic transformation was used for the 'morally deviant' word count variable and 'creativity', and square-root transformations were used for the 'dystopian' and 'fantasy' word counts. Ease of imagining the 'dystopian' and 'fantasy' worlds had negative skews, and these were corrected with reflected square-root transformations. All other variables were normally distributed.

5. Results

5.1. Preliminary analyses

5.1.2. Writing task

Participants wrote anything from four to over a thousand words describing the 'morally deviant' world ($M = 106$, $SD = 101$). Even after describing a fictional world in which the scenario was supposed to be true, 72 people (29.5%) nonetheless said that it is not true, in the world that they had described, that Giselda does the right thing in killing her baby. Of these, a small number of participants demonstrated resistance to even attempting to imagine the world. For example, one participant, as her description, wrote simply, "I don't want to think about a young girl being killed." Subsequently, she said that it is not true that Giselda does the right thing, justifying this with "because killing a young child is never correct." Other participants engaged fully in the task but still displayed imaginative resistance, such as the person who wrote the following description:

> In the current apocalypse, very few could defend themselves. The majority of survivors were middle aged men, and whoever they were devoted to protecting. The zombies recently developed a craving for women because of their smell, we don't know why. Giselda's husband, Dave, was very experienced in MMA, and did a remarkable job protecting her. She had never even been in a super dangerous encounter with a zombie since Dave protected her so well. Giselda discovered that she was expecting a baby. Dave and Giselda hoped with all they had that it was a boy, since baby girls were the most vulnerable. Unfortunately, Giselda had a baby girl who was missing her legs. They had no choice but to kill the baby. In killing her baby, Giselda did the right thing; after all, it was a girl.

Despite the detailed response, the writer did not believe that it is *true* that Giselda does the right thing: "I don't think that killing a baby is ever the right thing to do, though I can understand why it was necessary in my story. But just because it is necessary doesn't mean it is right." Most of the explanations for why Giselda does not, in fact, do the right thing reference morality: 31 directly state that killing (murdering or taking a life) is never morally acceptable. Although far fewer participants believed that they had failed to complete the task (where the given prompts are true in the worlds described; see "truth" results below), responses to the dystopian scenario also vary greatly, from a one-word description ("post-apocalyptic") to 400 words, as do responses to the 'fantasy' prompt (4 to 467 words; see Appendix for sample responses to all prompts).

5.1.3. Zero-order correlations

Pearson's *r* was used to assess the association between word count, ease of imagining for each of the three scenarios, and individual difference variables. All correlations are reported in Table 1. Only two variables are consistently related to word count and ease of imagining across scenarios. 'Need for cognition' is positively correlated ($.20 \leq r \leq .24$) with both variables in all three scenarios. People with greater 'need for cognition' wrote more words to describe the scenarios and found them easier to imagine. "Disgust sensitivity', on the other hand, is negatively correlated with word count and imaginability across scenarios, although the relation is not statistically significant for ease of imagining in the 'fantasy' scenario. That is, people who reported greater sensitivity to disgust wrote fewer words and found the scenarios more difficult to imagine.

5.2. Primary analyses

5.2.1. Comparisons across scenarios

Our first goal was to test for evidence of imaginative resistance by comparing the responses to the different prompts. The morally deviant world where Giselda kills her baby girl is the classic example of imaginative resistance

Table 1. Zero-order Pearson's correlations and 95% confidence intervals between word count and ease of imagining for each type of fictional world.

	Morally Deviant		Dystopian		Fantasy	
	Word count	Ease of imagining	Word count	Ease of imagining	Word count	Ease of imagining
Creativity	.04	.19**	.01	.08	.04	.07
	[−.11,.18]	[.07,.31]	[−.12,.15]	[−.06,.20]	[−.10,.17]	[−.07,.20]
Need for Cognition	.22***	.22**	.20**	.23**	.22**	.26***
	[.11,.34]	[.10,.33]	[.07,.33]	[.11,.34]	[.09,.34]	[.14,.37]
Moral Identity	.17**	−.03	.07	.10	.04	.12
	[.03,.30]	[−.15,.09]	[−.07,.19]	[−.04,.23]	[−.09,.16]	[−.02,.26]
Disgust Sensitivity	−.19**	−.23***	−.19**	−.20**	−.18**	−.12
	[−.30,-.07]	[−.35,-.11]	[−.30,-.07]	[−.32,-.07]	[−.29,-.06]	[−.32,.01]
Openness to experience	.09	.12	.09	.30***	.05	.32***
	[−.05,.21]	[.001,.25]	[−.05,.23]	[.19,.41]	[−.08,.18]	[.21,.44]
Extraversion	−.04	.01	−.21**	.06	−.16*	.09
	[−.17,.08]	[−.11,.14]	[−.33,-.08]	[−.06,.18]	[−.29,-.02]	[−.04,.22]
Neuroticism	.05	−.05	.02	−.24**	.05	−.17**
	[−.06,.17]	[−.17,.07]	[−.10,.14]	[−.35,-.12]	[−.06,.18]	[−.29,-.05]
Conscientiousness	−.003	−.01	−.01	.12	−.04	.09
	[−.12,.11]	[−.14,.12]	[−.13,.12]	[−.001,.24]	[−.17,.10]	[−.04,.22]
Agreeableness	.13*	−.06	.02	.07	−.01	.09
	[−.002,.26]	[−.18,.07]	[−.11,.16]	[−.06,.19]	[−.14,.13]	[−.04,,22]

***p <.001; **p <.01; *p <.05. All three ease of imagining variables are positively correlated: MD-Dystopian: r =.36, 95% CI [.24,.47]; MD-Fantasy: r =.30[.17,.42]; Dystopian-Fantasy: r =.59[.49,.68]. For the morally deviant world, people who wrote more words also found the scenario easier to imagine, r =.16[.03,.29]. There is also a positive correlation for the fantasy world (r =.13[.001,.27]), but there is none for the dystopian world (r =.11[−.02,.24]). No hypotheses were made for correlations between word count and other variables (statistics reported in tables for interested readers should be understood as purely exploratory).

(see Gendler, 2000). The dystopian world has been proposed as a counter-example unlikely to cause resistance, and the fantasy world reflects popular stories in books and film. We compared word count, 'ease of imagining', and the quantity of "no" responses to the question of whether the prompt is true in the world that participants described.

5.2.2. Ease of imagining
Repeated Measures ANOVA (Greenhouse-Geisser correction) show that participants reported that they found it most difficult to imagine the morally deviant world (M = 50.51), $F(2, 436.8)$ = 42.27, p < .001, η_p^2 = .152. Participants found it significantly easier to imagine both the dystopian world (M = 66; p < .001, d = 0.50, 95% CI [0.36, 0.65]) and the fantasy world (M = 68; p < .001, d = 0.57[0.42, 0.73]), which did not differ in imaginability (p = .271, d = 0.06[0.05, 0.18]).

5.2.3. Word count
A second Repeated Measures ANOVA (Greenhouse-Geisser correction) demonstrated that word count differed across the three scenarios, $F(2, 382.4)$ = 7.55, p = .002, η_p^2 = .030. Word count for descriptions of morally deviant worlds (M = 106) was significantly higher than those for dystopian

worlds (M = 90; p = .002, d = 0.18, 95% CI [0.07, 0.29]) and fantasy worlds (M = 93; p = .005, d = 0.15 [0.06, 0.25]), which did not differ (p = .428, d = 0.03 [−0.05, 0.12]). See Table 2 for details.

5.2.4. Truth

Despite dedicating more words to the description of a morally deviant world, many more people believed they had failed to describe a word in which the morally deviant scenario was true. The number of participants who answered "no" varied significantly across scenarios, Cochran's Q (df = 2) = 76.20, p < .001. Many more participants (29.5%) said that Giselda's killing her baby is *not* the right thing to do, compared to only 4.5% for dystopian worlds (χ^2 = 48.0, p < .001) and 7.0% for fantasy worlds (χ^2 = 36.0, p < .001), which did not differ (χ^2 = 7.33, p = .286). For the morally deviant world, those who said it is true wrote more words (M = 116) than those who said it is untrue (M = 82), t(242) = 2.40 p = .017, d = 0.34 95% CI[0.06, 0.61]. However, there is no difference in the reported ease of imagining, t(242) = 1.35, p = .178, d = 0.19 [−0.09, −0.46] (see Table 3 for details).

Table 2. Descriptive statistics for word count and reported ease of imagining the three fictional worlds. Final column contains percentage of participants who believed that the prompt scenario is not true in the world they had described.

	Word count		Imaginability		
Fictional world	*M*	*SD*	*M*	*SD*	Percent untrue
Morally deviant	105.99	101.27	50.51	31.60	29.5
Dystopian	90.29	71.18	65.81	28.79	4.5
Fantasy	92.70	68.45	67.64	27.95	7.0

Word count is significantly greater (ps ≤.005) and imaginability significantly less (ps <.001) for the morally deviant world; the proportion of participants who chose "not true" is also significantly different for the morally deviant world (χ^2 s ≥ 36.0, ps <.001 [McNemar's test used]).

Table 3. Mean differences for word count, ease of imagining, and related variables between those who said "yes" to indicate that it is true that Giselda does the right thing in the world they described, and those who said "no" to indicate that it is not true.

	Yes		No			
	M	SD	M	SD	p	d
Word count	115.98	110.56	82.14	69.62	.017	0.37
Ease of imagining	52.54	31.17	46.56	32.54	.178	0.19
Creativity	150.55	52.36	169.11	54.31	.013	0.35
Moral identity	94.20	14.32	96.82	15.06	.204	0.18
Disgust sensitivity	79.61	15.82	80.62	15.51	.649	0.06
Need for cognition	58.05	10.73	58.12	12.44	.966	0.01
Openness to experience	3.42	0.60	3.66	0.61	.005	0.40
Neuroticism	2.99	0.68	2.82	0.66	.080	0.25
Conscientiousness	3.51	0.56	3.56	0.50	.510	0.10
Agreeableness	3.75	0.55	3.81	0.64	.439	0.11
Extraversion	3.15	0.78	3.37	0.79	.047	0.28

5.2.5. Imaginative resistance and mean differences in potentially related constructs

We next investigated the relationship of imaginative resistance to other constructs by comparing mean scores on each scale for those who said "yes [it is true that Giselda did the right thing]" to means for those who said "no [it is not true that Giselda did the right thing]." Contrary to our expectations, participants who said "no" reported greater creativity than those who said "yes," $t(241) = 2.50$, $p = .013$, $d = 0.35$. There is no difference between means for 'need for cognition', $t(240) = 0.04$, $p = .966$, $d = 0.01$ or 'disgust sensitivity', $t(240) = 0.46$, $p = .649$, $d = 0.06$. Although participants who said "no" reported higher 'moral identity' scores than those who said "yes," the difference is not statistically significant ($t(240) = 1.27$, $p = .204$, $d = 0.18$). Participants who said "no" scored higher in both 'openness to experience' and 'extraversion'. There are no statistically significant differences in means for the other three factors of the Big 5 (see Table 2 for details).

5.2.6. Indirect effects

As an exploratory analysis, we wanted to test whether ease of imagining would mediate the association between 'creativity' and word count for the morally deviant scenario. Surprisingly, the zero-order correlation between 'creativity' and word count is not significant; however, because 'creativity' is related to 'ease of imagining' which, in turn, is positively correlated with word count, it is possible that we could find an indirect effect (MacKinnon et al., 2000), such that more creative people find it easier to imagine a world in which Giselda killing her baby would be the right thing to do and are therefore able to write more words describing such a world. To obtain an accurate measure of the indirect effect of unknown distribution, we used the SPSS Macro PROCESS (Darlington & Hayes, 2016), which calculates effects with bootstrapping. Bootstrapping, or repeated random sampling of the dataset (with replacement), does not require normally distributed indirect effects (Preacher & Hayes, 2008). The results of the analysis are in line with our expectations: greater 'creativity' is associated with more 'ease of imagining', $\beta = .20$, $p = .002$, and 'ease of imagining' is associated with more words being written, $\beta = .15$, $p = .023$, with a significant indirect effect of 'creativity' on word count via 'ease of imagining', $ab = .08$, 95% CI [.01, .19].

6. Discussion

The purpose of this study is to extend the limited extant research on the moral imagination by exploring the role that authorial authority (or lack thereof) plays in imaginative resistance to fictional stories with morally deviant content. As such, in a within-subjects design where the order of presentation was randomly assigned, we asked participants to create

fictional worlds in which three different statements were true, resulting in morally deviant, dystopian, or fantasy worlds. We assessed imaginative resistance to these worlds in two ways: (a) participants were asked to rate how easy it was for them to imagine the world, and (2) we asked them if the prompt-statement is true in the world they created. If imaginative resistance to immoral fictions arises due to the author's lack of authority to dictate what is right or wrong in a story, then having participants write the stories should decrease reported resistance to them, such that ease of imagining and truth judgments would not be significantly different in the morally deviant world compared with the dystopian and fantasy worlds. If, on the other hand, imaginative resistance results from the nature of morality – for example, if morality is authority-independent or if rules hold across all possible worlds – then participants would report greater resistance to the morally deviant world. Our results suggest that there is something about morality itself that causes resistance independently of authorial authority: participants reported much more imaginative resistance to the morally deviant world on both measures.

Importantly, there are significant differences between the morally deviant and the dystopian and fantastical worlds. Despite having written, on average, more words to describe a world in which Giselda killing her baby is the right thing to do, participants found this world much more difficult to imagine than the dystopian and fantasy worlds. Even more telling are the truth ratings: 29.5% of participants said that it is not true that Giselda does the right thing, whereas only a few people (the same people, in our within-subjects design) said the same of the other worlds. In the case of the fantasy world, about which the participants were asked if Carlos and Stacy have to feed the dragons, when they said "no," it was often not because such a thing is unimaginable, but because their fantasy world holds no *requirements* for dragon feeding. These results lend credence to the existence of true imaginative resistance specific to morally deviant fictions, which works independently of authorial breakdown. Despite being cast in the role of the author themselves, a subset of our participants nonetheless demonstrated imaginative resistance, reporting that they themselves had failed to create a world in which the morally deviant action is morally correct. Strikingly, however, there seem to be significant individual differences on this front. On the whole, participants attempted to perform the task: despite being given no instructions on length, most participants wrote at least a small paragraph describing the morally deviant world. However, a few participants refused to do so ("I don't want to think about a young girl being killed"), and many more did not believe they had been successful, even after attempting to do so. On average, writing more words made it more likely for participants to believe that it is true that Giselda does the right thing, but even those who thought that it is not true wrote an average of 82 words.

The failed attempts to complete the task – according to the participants themselves – suggest that for some participants, it was a case of inability rather than unwillingness to conceive a morally deviant world: they tried but could not create a world in which killing a baby girl is the right thing to do. Philosophers have debated whether the perception of being unable to imagine morally deviant worlds is really a case of unwillingness (cf., Currie & Ravenscroft, 2002; Gendler, 2006; Todd, 2009; Weinberg & Meskin, 2006). Our results suggest that both may be happening, even in the same person. Here, some people were neither willing nor able, others were willing to engage in the task and tried to describe a morally deviant world but then felt that they were unable to complete the task successfully. Several participants refused to engage in the task at all, stating things such as, "There is no world where killing a child simply because it is a girl is right," rather than trying to make up such a world. However, the vast majority not only created a morally deviant world, they also believed that they had successfully done so.

It should be noted that although Giselda killing her baby is the most frequently offered example of a scenario likely to provoke resistance, its closeness to real life may actually make it easier for some people to imagine. For example, one person wrote, "Under China's one child policy, some families resorted to killing female babies as males were seen as more capable of supporting a family. In a fictional world this could easily become a more common practice." That said, the availability of real-life examples did not mean accepting that they were *right*. Another participant wrote, "Giselda lives in China and already has one child, who is also a girl. She was hoping for a boy this time." This participant believed that this is not, in fact, moral: "Because killing is never right. I don't care what world you live in." Future research is needed using examples that are less likely to occur on a societal scale in real life, and which provides quantitative data facilitating a comparison between ability and willingness to imagine.

Participants may also have interpreted the 'truth' variable question ("In the world you described, is it true that Giselda's killing her baby was the right thing to do?") as asking whether it is true that killing *any* baby in the story world is moral, rather than killing a baby just because it is a girl. However, not only do most of the fictional worlds described clearly indicate that they are trying to justify Giselda's killing her baby because of its sex (e.g., "The world is full of hatred toward females. Males are seen as prized beings in this world . . . "), but many explanations of a "no" response clearly indicate understanding, for example, "Because she was taking an innocent life no matter what the gender may be" and "Killing babies in itself is immoral but because it was a girl makes the problem worse." This response indicates understanding and generalization; on the other hand, others generalized without making it clear that they had understood: "Because killing

an innocent life is wrong." This generalization may in fact be one of the causes of resistance (Gendler, 2000, 2006; Murray, 2001).

Similarly, it is also possible that some participants interpreted the truth question to be asking whether it is true that Giselda *thinks* it is right to kill her baby, rather than whether it is "true in the fictional world" they had created. For example, this story, referencing reality, may imply that the truth of the statement depends on Giselda's implicitly mistaken beliefs: "Giselda lives in Asia, where it is in their culture to think that its ok to kill a girl when she's born. They would rather give birth to boys. She truly thought she was doing the smart and correct thing so she left her baby girl in the bath." What is more, this participant answered "yes" to the truth question. On the other hand, one negative response to "Why not?" suggests that such interpretations result in imaginative resistance: "It was still an area of moral ambiguity. She thought what she was doing was right, but most people try to justify their actions that way. She was following societal standards but societal standards aren't always right just because they're prevalent." These difference responses may also reflect individual differences in generalization from the story world to reality.

7. Imaginative resistance and individual differences in related constructs

A secondary purpose of this research was to test the association of imaginative resistance and individual differences in personality, creativity, need for cognition, moral identity, and disgust sensitivity. To do this, we tested for correlations between 'ease of imagining' and these variables, and we compared the mean differences between the "yes" and "no" answers for 'truth' in the morally deviant world created by the participants. In line with our expectations regarding the unique properties of immoral scenarios, there were not enough "no" responses to compare means in the dystopian and fantasy worlds.

As predicted, 'need for cognition' is positively correlated with greater word count and ease of imagining across all three worlds; however, there is no significant difference between means on the 'truth' variable. 'Need for cognition' is apparently associated with imagination more generally – at least, imagination as operationalized by the ease of imagining three types of fictional worlds – but it is unrelated to the moral content of imaginative endeavor. Interestingly, because we had expected a unique association between disgust and imaginative resistance to the morally deviant world (Black & Barnes, 2017), disgust sensitivity is negatively correlated with word count and 'ease of imagining' for all three worlds.[2] Again, our hypothesis regarding the truth variable – that participants who answered "no" would report greater disgust sensitivity – is not supported. In other words, like

'need for cognition', 'disgust sensitivity' is related to task performance (in all three worlds), but not to the result ('truth', at least for the morally deviant world). It could be that both variables relate to the imaginative activity implicit in authoring a fictional world but not to thinking critically about the content of such a world, or it could be that having themselves made up the world washed out any association between individual differences and engagement with a morally deviant world. When it comes to disgust sensitivity, it could also be that the Giselda scenario, which involves a harm rather than a purity violation, does not trigger a disgust response. Moral purity concerns have a much stronger relationship to disgust than to moral harm violations (Giner-Sorolla & Chapman, 2017; Haidt, 2007). Asking participants to write a fictional world in which a purity violation (such as cannibalism or incest) would be permissible could result in an effect of disgust sensitivity.

In fact, only one of our predictions regarding the truth variable has been confirmed: participants who said that it is true that Giselda killing her baby is the right thing to do wrote more words to describe the world that they had imagined. Contrary to our expectations, people who said that it is not true scored higher in 'creativity' and 'openness to experience'. We had also expected 'creativity' to relate to word count in all three writing tasks; however, they were only related in the morally deviant world, and the effect was indirect, through 'ease of imagining'. Fascinatingly, whereas 'creativity' is only related to ease of imagining the morally deviant world, 'openness to experience' is related to ease of imagining the dystopian and fantasy worlds but not the morally deviant one. In short, the association between 'creativity' and 'openness' and imaginative resistance remains unclear based on these results. An important avenue for future research is investigating whether these distinct associations hold for engagement with worlds created by other authors as well as in different samples of participants asked to make up their own worlds. It may be that participants' failure to describe a world in which a morally reprehensible act is good reveals their own individual differences in imaginative resistance and creativity, but can say little about how these same participants would engage with morally deviant fictional worlds expertly described by accomplished writers.

It remains possible that imaginative resistance could disappear within the rich context of well-written (or filmed) fiction; perhaps some subset of the individuals who answered "no" on the 'truth' question here could nonetheless be persuaded by the right text. Similarly, it is possible that if this experiment were repeated using professional authors as participants, who are experienced at creating story worlds, a different pattern of results might be found. Both theory (e.g., Meskin & Weinberg, 2012; Stock, 2005) and empirical research (Liao et al., 2014) suggest that context lessens imaginative resistance. However, there were some participants who exerted more than

the average effort (operationalized as word count), yet answered "no" to the truth question. It seems that for some people at least, it may be more difficult to overcome resistance to immoral content with context – even context they themselves provide – than some theorists propose. Further research could help deepen understanding of the influence of context. For example, participants could be asked to create the shortest account possible to describe a fictional world in which a normally immoral proposition would be permissible. Alternatively, participants could be randomly assigned to different word limits for story-world creation.

Future research is needed to examine these possibilities, as well as to determine the extent to which participants who failed to create truly morally deviant worlds here did so because they were, in an important sense, unable to separate fiction from reality. Another potentially informative option for future studies regards individual differences in broad moral paradigms. For example, people whose folk morality tends toward consequentialism may find it easier to imagine outcomes that would outweigh the harm of the immoral act. On the other hand, a deontological standpoint may make it extremely difficult to overcome resistance. Some responses to "why not?" seem to reflect strong duty-based folk morality: "Because killing is never right. I don't care what world you live in." Alternatively, self-presentation and/or socially desirable responding could also have affected the 'truth' response variable: it is one thing to complete a task describing a morally deviant world at the request of a researcher, it is another to admit to having successfully created such an immoral world.

As a whole, this study contributes to the limited empirical research on the phenomenon of imaginative resistance to immoral fictions, and it suggests many avenues for future investigation. For example, in this study we have asked participants to judge themselves whether they successfully described worlds in which the three prompts are true. A separate – and perhaps just as interesting – question is whether others would consider them to have successfully done so. The associations of other-ratings of truth with individual differences in creativity, need for cognition, and other variables, and whether these resemble the effects (or lack thereof) found here would also be of interest. What is more, although moral cognition does seem to operate differently even for realistic scenarios (Phillips & Cushman, 2017), people do seem to experience imaginative resistance to violations of esthetics and humor (Kim et al., 2018), as well as to conceptually contradictory fictions (Barnes & Black, 2016). As such, the current research could be extended to violations of logic, esthetics, and humor, as well as to other examples of morally deviant worlds. Would participants experience imaginative resistance to such worlds even if they made them up themselves, as they did to the morally deviant world here? This is an area ripe for future research.

Notes

1. A power analysis based on the association between 'disgust sensitivity' and 'ease of imagining' reported in Black and Barnes (2017; $r = -.24$) indicates the need for $N = 131$. To compare 'ease of imagining' across scenarios within subjects, we referred to Barnes and Black (2016), which indicates a much smaller sample. However, the study was continued until the end of the semester to meet subject-pool needs.
2. Although the correlation is not statistically significant for the fantasy world, the confidence interval suggests a similar effect.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Jessica E. Black received her PhD in Psychology from University of Oklahoma and recently completed a postdoctoral fellowship there. Her research focuses on issues that arise at the intersection of morality, narrative, and imagination.

Jennifer L. Barnes is an Associate Professor at the University of Oklahoma, where she holds a dual appointment in Psychology and Professional Writing. She researches the psychology of fiction and the imagination and is the author of more than twenty published novels.

ORCID

Jessica E. Black 🄳 http://orcid.org/0000-0002-9710-3297

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Appendix

Sample descriptions where the participants believed it is *true* that Giselda does the right thing in killing her baby, that wolves are roaming the towns of England, or that Carlos and Stacy have to feed the dragons:

Morally Deviant world:

In the world of Jerica everything is regulated. Every family was identical, mother, father, sister, brother. When a family gives birth to a second child they must make sure it is in alignment with the standards set by society, so if they birth twin girls, one must die in order to keep perfect balance in the world.

Earth has become a planet dominated by men. Throughout history, women's rights have become decreasingly present. Most women live hard lives as slaves to men with almost no human rights. Giselda recently had a daughter and does not want to see the child live a difficult life on this planet where women are treated so poorly. In Giselda's mind, she is doing the right thing by giving her daughter no life at all, as opposed to a difficult one.

In ancient Rome, babies needed to be strong and healthy to survive. The people wanted only baby boys so that they could grow up to be in the military and fight for Rome. They would exile baby girls to live on their own, so Giselda killed her baby girl as opposed to her being forced to fend for herself.

In a dystopian society, a very small community exists. This society is matriarchal with a council of mothers who are the only women in the group. They keep up the Society's population by bearing the children of specially picked men and if the population becomes too much they begin to limit the production of new children. This Council is very elite and very strict. If ANY child is born with a defect or in this case a female and therefore a new member of the council, it is swiftly dealt with. Only if an existing member of the council dies of natural causes, is another female allowed to be born.

The quotas they had put in place were absolute – two boys and one girl to every family. Giselda, however, didn't want to play it safe. She already had a daughter, but she refused to take the gender potion her husband had brought home that day. She said she didn't like the way it made her feel, and mentioned that the odds of her having another girl were slim, anyway. She wanted more children, and though she accepted they would have to be boys, she was a little sad she only got one daughter. It just didn't seem fair – boys were loud and dirty, and her little girl was already so sweet and loved dressing up. When she could walk and talk, she was sure her daughter would tell her exactly how much. She flushed the potion down the toilet that night, and nine months later, when the bouncing baby girl was placed into her arms, she had never regretted any action so much. However, she wouldn't disobey the law – if the parents wouldn't dispose of the child, the parent of that gender would be disposed of. She would never leave her husband in the lurch like that, so she did what she had to do. She drove to the nearest disposal facility, handed them the box, and left.

It's 2050 in Bejing, China. Previous years had known the presence of both males and females. Now, everything is different. Only a select group of women are allowed to live with the sole purpose of reproducing males. They were carefully chosen based on intellect, athleticism, and good health. The Chinese government only wanted to create the best of the best, which in their eyes are men that hold these qualities. Giselda, the head of the Chinese Women's Society, is pregnant the most. Her and the rest of the prestigious group were brain washed to believe everything their government tells them. This includes the belief that all females, besides their group, must die. Therefore, Giselda didn't think twice when killing her baby girl.

In a world filled with magic, witches, goblins, and demons, there is bound to be chaos and destruction. Giselda, a beautiful princess, was the most popular woman in the city. Everyone adored her personality and charm. But, there was one witch who was extremely jealous of Giselda. Giselda fell for a handsome man named Gaston. They soon become married and are expecting a baby on the way. Everyone in town cannot wait for this perfect baby to arrive. It turns out that witch also loved Gaston. In jealous and hate, the witch cast a spell on Giselda; her first born child would have a life filled with torture and pain. Once Giselda became aware of this spell, she knew there was nothing that could break it. Therefore, Giselda had to kill her unborn child to save it. In killing her baby, Giselda did the right thing; after all, it was a girl.

Dystopian World

Things were normal in 2015, but by the time 2018 rolled around everything had changed. The disease mutated faster than anyone expected and infected thousands by the hour. Instead of the post-apocalyptic zombie attack everyone had expected and prepared for, there was only silence. This disease did worse than a flesh eating virus or a 'zombie virus'. It affected the essence of human nature. It dulled the mind little by little until there were no thoughts, no feelings, and no actions. As the mind dulled, the body became stagnant and sedentary. It would slowly desiccate until there was nothing left. The disease started out as being curable, but mutated within days and infected within hours. Slowly, there was nobody left. Nobody to watch over the sleepy little towns of Europe and no one to stop the Earth from taking over cities. The disease started in 2018 and by the year 2020, packs of wolves were roaming the towns of England.

(*Continued*)

(Continued).

Morally Deviant world:

I used to love visiting my grandparents' home in Norfolk, but now that I live here, everything has changed. Three years ago, a laboratory of the west side of England contaminated the water supply with a chemical that cause the wolves to breed at increased speeds. They have grown numerous, vicious, and too strong withstand effectively. The whole countryside locks their doors around 4:30, a previously unheard of event. The wolves have us all scared, they've snatched pets, livestock, and even a few careless people. I don't know what we're going to do.

In this world, England has been bombed and completely destroyed in a war and is now a ghost town. There was too much damage to completely rebuild the country and the memories associated with it are painful. This has left it occupied by wolves and scavengers.

In 2015, Bono revealed his true identity.. A Super Villain with one goal- to take over the world with his army of wolves that he has been hoarding since 1989. If you can recall, 1988 was the world's worst year for wolf attacks. Bono saw opportunity. Fast forward – Two dominant wolves are hanging onto the clock hands of Big Ben, looking down on a city in flames.

I picture this world to be full of domesticated packs of wolves. The English have tamed wolves to do work for them transporting both goods and people and the wolf packs have become a tourist attraction. This new transportation method has cut down on fuel costs because of the rising prices of petroleum energy worldwide.

In the year of 2020, the town of Manchester would be invaded by wolves after Manchester United loss against Chelsea Football Club in the FA Cup. The country men of Manchester let loose a pack of wolves to munch on some Manchester soccer players. Now, Manchester United soccer club will not lose another game.

In the year 2017, a plague had once again struck England. Those who tested negative for the disease were immediately moved out of the country to a safe-haven on the water where they were then shipped to South America. Those who tested positive were quarantined in certain areas until a cure was found. By 2019 the hope for a cure gave up when the fatality rate hit 90% of those who had it. After that point the bodies of the dead were collected and burned and all of England was considered a wasteland. By 2020, nobody had been hunting wolves in England since the plague struck and wolves were the only animal in the area that were immune to whatever disease had struck. They would roam the streets looking for food unaware that they would soon die off to for a lack of sustenance.

Fantasy World

Carlos and Stacy had received three dragon for their birthday. Their parents finally decided that once they were thirteen, they were capable of being responsible. Most kids their age however, were not allowed to have dragons yet because their parents understood dragon's natural instincts./Carlos and Stacy's parents did their research before buying the dragons for their children and discovered that they must be fed in order to ride or play with the dragons. They discovered that dragons were quite common now a days.

One day, in the Jurassic Era, Carlos and Stacy were preparing for the Dragon Racing Tournament of Champions (DRTC). The time where all the fastest dragons around the planet came to show off their skills. Carlos and Stacy were the 6th conglomeration team. This is the first time they qualified in the DRTC. They will represent the 6th conglomeration in the race. They are determined to be the best. As the race comes closer, Carlos and Stacy made sure the dragons were properly fed before riding them.

I don't like to brag, but I'm the best dragon rider in my town. When I'm airborne, there's nothing out there to stop me. There's nothing out there to make me feel inferior. Not the girls or the boys or even my own brother, Carlos. I'm invincible. And nothing was going to slow me down the morning of the big competition. I was especially careful to saddle up my dragon and feed him early in the morning so he was all prepared to win. When we fly, it's like we're a single, sailing, airborne being. And that's why we're the best.

In July of 4078 (Earth time), Carlos and Stacy moved to the planet STZ 45. They had arrived with only $500 to their name. Looking for any form of employment, they found work training a newly discovered creature, the dragon. These dragons were the important to society on STZ 45 because they were one of the primary forms of transportation. The more common fuels use for transporting people on the neighboring planets were scarce, so inhabitants of STZ 45 mainly rode on flying dragons. Each morning, Carlos and Stacy would feed the dragons before spending all day training them to carry a person on their backs.

When cloning became a process of ease by the 22nd century, companies began investing much more in genetic research. Any organism that had previously existed could be easily recreated by plugging in the genetic information into a large scale 3D printer. By this time, not only could scientists clone things- they could cross-breed and make entire genetic volumes coding for different things on their own./In 2234, the first dragon was created. By using a combination of Tyrannosaurus and Pterodactyl DNA crossed with genetic material from other domains- scientists could create whatever kind of organism they wanted, with the only restriction being their imagination. The dragons were completely friendly as long as one condition was met- they couldn't be hungry./By 2260, hovercars and bikes were replaced with a more efficient mode of transportation- dragons. They began being mass-produced and sold at a price where they were affordable for most./For her eighteenth birthday, Stacy received her first Dragon and was finally taking her first steps into adulthood. Later on that night, her and her friend Carlos were supposed to go to a party for her birthday. Something came up and the two of them were running very late. When they finally got back, Carlos and Stacy had to make sure the dragons were properly fed before riding them.

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Morally Deviant world:
Scientist on earth discovered a new formula that allows them to control the genes of certain animals. The only animal they found to be successful was a lizard. This came at a crucial time because the earth has depleted its oil reserves causing gas to be outrageously expensive. This new sciences was used to create flying lizards that were then called dragons, which people bought as pets and transportation.
Carlos and Stacy lived in a parallel universe where instead of cars they had dragons. These dragons were vicious but the only way of transportation. To ride them was a honor but a brave task. First, Carlos and Stacy had to trap their dragons and train them to act as cars. To trap your dragon you had to jump on top of its body during flight. Then you could train the dragon to be rideable by bribing it with food. Carlos and Stacy could not ride these dragons unless they were fed because if not they would try to attack them and eat them.

Sample descriptions where the participant believe it was *not* true that Giselda had done the right thing

Description	Justification for "no"
It was around the time of the Salem Witch Trials and Giselda was terrified. She knew that these trials were just a facade for what people in higher standing really wanted and that townsfolk just went along out of hysteria, but little did the townsfolk know that they were living right in the heart of witch country and that these trials were stirring up the hatred and anger of the Elders. The Elders had formulated a plan to 'take' every newborn baby girl from the Lovegood line and harvest their powers in order to protect the witches and place a nasty hex on those who persecuted them. Giselda just happened to be the matriarch of the Lovegood line and has just given birth to a baby girl. She knew that the choice she was making was against either her own blood or her own being. She decided to save her daughter from a fate worse than death by doing the only thing she could think of. In killing her baby, Giselda did the right thing; after all, it was a girl.	She could have smuggled the baby out or given it up in secret.
I cannot imagine a world where it is acceptable to kill a baby no matter gender. i know sometimes in china babies are left in the wild or in remote areas that cannot handle physical deformities the babies are killed but i cannot imagine in first world countries killing an innocent baby it didn't asked to be born	It's unimaginable that's your flesh and blood that baby didn't asked to be born
In the current apocalypse, very few could defend themselves. The majority of survivors were middle aged men, and whoever the were devoted to protecting. The zombies recently developed a craving for women because of their smell, we don't know why. Giselda's husband, Dave, was very experienced in MMA, and did a remarkable job protecting her. She had never even been in a super dangerous encounter with a zombie since Dave protected her so well. Giselda discovered that she was expecting a baby. Dave and Giselda hoped with all they had that it was a boy, since baby girls were the most vulnerable. Unfortunately, Giselda had a baby girl who was missing her legs. They had no choice but to kill the baby. In killing her baby, Giselda did the right thing; after all, it was a girl.	I don't think that killing a baby is ever the right thing to do, though I can understand why it was necessary in my story. But just because it is necessary doesn't mean it is right.

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Chinaville, a place of immaculate beauty, was a sexist land in which rape culture ran rampant. Women were forced to be married off at a young age and marriage constituted a kind of ownership men had over women. Having a girl meant her child would live a miserable life, so Giselda felt death was more humane than the terrible life she had led.	She should have done something to change the outcome of her child's life rather than ending it.
The year is 3086, and the government has ruled that love is forbidden, unless it is toward one's country. There are no marriages, or relationships of any kind. The punishment for these crimes was to be forced outside of the city, where the mutant beasts would slowly kill any man. Giselda has seen this happen when she was a child. She had followed the crowds to the gates, where a man was being forced out. That day Giselda watched him be eaten alive and she was scarred. Children are raised in a special school instead of families. Children are created genetically in laboratories to fit the needs of the state. The only women alive are the surrogate mothers whose job is to deliver the children safely. Giselda is one of these mothers. She was unfortunate enough to fall in love with one of the men who worked in the school raising the children. Giselda made one mistake, just one, and she learned it would cost her everything. She was pregnant. Not with a genetically created child, but with a random mixture of genes. This would mean the death of her. They were sure to find out. No one took any notice that she was with child. But when she delivered it, to her horror, it was a baby girl. Giselda knew she could not give her child to the wild beasts to be eaten. She would not let her daughter suffer. The only way to save the baby suffering and her lover from death was to kill the daughter.	The baby's life is not Giselda's to take. She is lowering herself to the level of morality of the government by killing her own child.
I cannot think of a story where someone would want to kill their baby	Because I don't like to imagine bad scenarios
Giselda is an unmarried teenage girl living in the 1800 s in the far off land of Rishal. Her father is furious when he finds out that his only child, a daughter, is pregnant. He has always had a hard time excepting her, and never lets her forget that he wanted a boy. Eventually the whole town knows of Giselda's pregnancy, and the father becomes so mortified that he tells his daughter that she cannot have the baby. Terrified for her life and her unborn child, Giselda turns to her mother for help. Giselda and her mother devise a plan to fake the death of the child. When Giselda's daughter is born, she and her mother hide the baby in their barn and tell the father that they have killed the child. Later, the father is gloating to his friends and tells the men that in killing her baby, Giselda did the right thing; after all, it was a girl. Later that night, Giselda takes her baby girl and escape to a near off town.	Giselda loved her child, and her mother agreed. Her father was only upset and told her she had to kill her child to save his honor. In the end, Giselda didn't actually kill her child, because she knew it was wrong.

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In 2356, the city council of Ottotopia had figured out a birthing plan in order to keep the population at a reasonable number. The city levels were becoming unbalanced and the equilibrium was being thrown off. Every family was allowed two children, one boy and one girl. Giselda and her husband lived in a nice suburb in Ottotopia on the north side with their three year old daughter. October came around and Giselda found she was pregnant again. Weeks went by and it was time for her second ultrasound appointment. The family went in around noon, checked in, and waited to be called. "Giselda Thompson?" the technician called from the door. With nervousness Giselda rose from her seat and followed the tech into the first room on the right. She sat on the edge of the examination table fiddling with her fingernails. Giselda came out with a mortified look on her face after being examined and her husband knew instantly she did not have good news. "It's another girl" she said faintly. Giselda scheduled an abortion date for the following week before leaving the clinic. Immediately after walking out the large, glass doors. Giselda fell to her knees and bawled into her weak hands.	No hierarchy should be allowed to decide fate for its citizens.

Sample descriptions where it was *not true* that wolves were roaming the towns of England

Description	Justification for "no"
This world strives to create a political system without bias. It attempts to eliminate all outside factors and educate students about government in an unbiased setting. It also forces citizens to be part of the political process and vote (or face consequences).	It was not mentioned in the story and is not relevant at all.
In 2017, Ebola became widespread. Thousands of people became infected. Of course, none of this would have happened if it wasn't for the dirty bombs planted by ISIS across the allied nations. New York, Dallas, L.A., Chicago, London, Wales, and Paris were the first ones hit. It spread across the United States in a matter of weeks. England wasn't that lucky./By 2018, the CDC was making headway. They were almost finished creating a vaccine capable of widespread production and distribution. This vaccine was actually working. Things were finally starting to look bright in the world./Until one year later, when the Ebola virus mutated. It adapted to this vaccine. Similar to how a yellow jacket adapts to a pesticide. The weaker viruses were killed off, but the virus that was immune came back stronger./No one listened to the government any more. This virus is the cause of the extinction of the human race.	The wolves roaming England was implied. Human life was erased and natural life inherited the once populated cities and towns.
A world where the population has done such horrible things that a referendum has been suggested offering the citizens an opportunity to forget the crimes of their country but everyone has to agree. Only a select group will be allowed to keep their memories of the country's history and crimes. Gail and Jason are running to vote against the measure because though it pains them to know what they as citizens are partially responsible for, they still feel that they should remember the events.	Because I didn't think of it..

(Continued).

Description	Justification for "no"
In the year 2015, the United States government had waged war on the Sovereign nation of Shidonia, formerly known as Western Europe. The casualties were endless, considering the size of the States and the resources of Shidonia. To prevent further casualties, the scientists rebelled against the government who had confiscated a prototype bio-hazard weapon for use. The weapon was not meant to be used, but nevertheless was fired and wreaked massive havoc on both nations. The rebellions stroke up influence all over the country and the States had to pull out of what was becoming World War IV. The radiation and modifications from the weapon used, however, caused massive deaths of Shidonia warriors as well as civilians. The disease was spreading, and soon would wipe out most of humanity. The genetic components of wolves, however, allowed them to feast off of the rotted flesh of corpses and not rot themselves. Soon, by 2017 wolves had overrun most of the mainland continent. But since ships were still running, the disease would spread to England soon. Its assumed that the same thing would happen there now.	It was a causal story, rather than an action story.
If by the year 2020, packs of wolves were roaming the towns of England, than society must have been degraded somehow in order for those wolves to freely roam. The population of humans in that town must have been slim or else there is the possibility that the humans would have fought them off quickly.	I could not see a society that allowed wolves to roam freely.

Sample descriptions where it was *not* true that Carlos and Stacy had to feed the dragons:

Description	Justification for "no"
Carlos and Stacy puffed the magic dragon for a few hours and then suddenly though they were about to ride upon said dragon so they in essence fed their high.	they were just getting high
When Pangea split, in this alternate timeline, Africa and South America stayed connected to form a mega tropical continent. The abundant resources and fertile climate allowed for regular lizards and the already massive komodo dragons to grow to much larger sizes. These creatures far outmatched humans of the mega continent in sheer mass and ferocity, but the humans took a peaceful approach to the creatures. Amicable "dragons" were cultivated and kept as friends. After several generations of selective breeding, some were even bioengineered as steeds, for both transportation and combat.	The dragons are well trained and independent, they are able to obtain their own nourishment when necessary.
When machines were able to go as fast as the speed of light, a planet called Earthaia was discovered. Within this world many mystical creatures are roaming including dragons and unicorns. When the world was discovered humans decided to build on the planet since it was able to accompany living creatures. With the change of species, humans were skeptical of encountering them. Once the encounter happened they noticed that the creatures were extremely loyal and kind.	because they are loyal and kind to where they could be pets but that doesn't mean they can't survive in the wild.

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Since the discovery of dragons, humans began replacing their automobiles. Dragons are fuel efficient, safe, reliable and quick way of traveling. If you are traveling anywhere over this holiday season, take a dragon! You'll be draGONE in no time!	Carol and Stacy feeding their dragons was just a basis for my story. I wrote a short commercial persuading the reader to pick a dragon as their form of transportation.
I imagine this world in old time England where Carlos and Stacy are a prince and a princess. In this world there are dragons and castles and all types of imaginary creatures that are all under the rule of this family.	It never came to mind
Hundreds of miles above the Earth is a planet that has yet to be discovered. Unlike our Earth, it is a place where creatures thought to be fairy tale live alongside humans. It is a place where everything we thought to have been bedtime stories, comes alive. There are those who choose to live in peace with these creatures and those who are bent on manipulating them for their own selfish wants. Two notorious criminals have devised a plan to take these creatures and pillage the surrounding communities. Carlos and Stacy made sure the dragons were properly fed before riding the m.	Because they're criminals who aren't worried about the dragons or their well-being.