

Against Motivational Efficacy of Beliefs

Abstract

Bromwich (2010) argues that a belief is motivationally efficacious in that, other things being equal, it disposes an agent to answer a question in accordance with that belief. I reply that what we are disposed to do is largely determined by our genes, whereas what we believe is largely determined by stimuli from the environment. We have a standing and default disposition to answer questions honestly, *ceteris paribus*, even before we are exposed to environmental stimuli. Since this standing and default disposition is innate, and our beliefs have their source in environmental stimuli, our beliefs cannot be the source of the disposition. Moreover, a recent finding in neuroscience suggests that motivation is extrinsic to belief.

Keywords: Belief, Desire, Disposition, Evolution, Motivation

Park, Seungbae (2015). "Against Motivational Efficacy of Beliefs", *Coactivity: Philosophy. Communication* 23 (1): 86-95.

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1. Introduction

In folk psychology, a belief and a desire are often jointly used to explain human behavior. For example, I am drinking water because I believe that drinking water quenches thirst, and because I have the desire to quench my thirst. A belief is a cognitive state that represents a state of affairs in the world. It is capable of being true or false. In contrast, a desire is a conative state that motivates an action. It is incapable of being true or false. Danielle Bromwich (2010) advances a novel thesis that all beliefs, moral or non-moral, are capable of motivating actions as well as representing facts:

I then argue that we have good reason to think that *all* beliefs can motivate a particular action without the assistance of a conceptually independent desire. (Bromwich, 2010: 344)

Bromwich's theory of belief clashes head-on with Michael Smith's theory of belief (1994). Smith claims that a belief alone does not motivate an action and that both a belief and a desire are required to explain an action. The aim of this paper is to refute Bromwich's arguments for the view that a belief is motivationally efficacious and to defend the Humean view that a belief is motivationally inert. I will show that a belief does not have a dispositional property.

2. Bromwich vs. the Humean

Let me begin with Bromwich's example, which is useful in exhibiting the differences between her theory of belief and the Humean theory of belief:

Consider David. He believes that 'The knives and forks are on the table' and so when Carole asks him 'Are the knives and forks on the table?' he replies 'Yes'. Now imagine that David has this belief, is asked the same question by Carole, but does not answer at all. Can we make sense of David having the belief in question? Only, I think, in a situation where things are not otherwise equal. David may want, for instance, to give Carole the 'silent treatment'. His belief

disposes him to answer 'Yes' but this disposition is defeated by a competing disposition arising from his desire. But, if all things are equal, and Carole asks him 'Are the knives and forks on the table?' what could prevent David from answering this question in the affirmative? (2010: 351)

David says yes to Carole's question "Are the knives and forks on the table?" Why does he say so? Bromwich and the Humean have different explanations. On Bromwich's account, David says so, because he believes that the knives and forks are on the table, and "the belief alone explains the action" (2010: 352). The desire to say so need not be invoked to explain why he says so because the belief is motivationally efficacious enough to produce the action of answering the question affirmatively. Thus, Bromwich's theory of belief can be summarized by what she calls the minimal thesis:

The minimal thesis: A subject S believes that p only if, if S were asked if it is the case that p, S would respond in the affirmative, all other things being equal. (Bromwich, 2010: 351)

If a subject believes that p, then, *ceteris paribus*, he would say yes to the question: Is it the case that p? If he does not say so, it is hard to attribute to him the belief that p. A belief is motivationally efficacious in the sense that it disposes an agent to answer a question in accordance with it.

On the Humean account, in contrast, David says yes to Carole's question, because he believes that the knives and forks are on the table and because he desires to say so. The belief is motivationally inert, so it alone cannot bring about the action of answering the question. The belief needs a motivational backup from the desire to answer honestly. The Humean can add that the desire to answer honestly is a standing desire, i.e., it is a desire that we always have. Also, it is a default desire, i.e., if there is no special reason not to be truthful in a particular situation, we have the desire to answer honestly. This default desire is independent of a belief.

Suppose that David does not answer Carole's question when he believes that the knives and forks are on the table. Why doesn't he answer her question? Again, Bromwich and the Humean have competing explanations:

The Humean argues that although David has the belief in question, David also has a desire that directs him not to answer the question in the affirmative; a desire, say, to give Carole the 'silent treatment'. The minimal theorist can agree—but, the minimal theorist will argue, David's belief still disposes him to answer the question in the affirmative; David just fails to act on this disposition because it is defeated by the desire. (Bromwich, 2010: 352)

According to Bromwich, David believes that the knives and forks are on the table, so he is disposed to answer Carole's question in the affirmative. But he does not answer it because his disposition is defeated by another mental state. Perhaps, he harbors anger toward her. In his mind, there was a conflict between the belief and the anger, and the anger vanquished the belief. As a result, he does not answer her question.

According to the Humean, on the other hand, a belief is motivationally inert, so David's belief cannot dispose him to answer Carole's question affirmatively. He instead has the standing desire to respond honestly to questions from others. But the default desire is overridden by his anger toward her. As a result, he does not answer her question. Both his default desire and his anger toward her are independent of his belief that the knives and the forks are on the table. The belief, since it lacks motivational force, did not participate in the battle between the standing desire and the anger.

As sketched above, Bromwich and the Humean have competing explanations as to why David answers or fails to answer Carole's question. As Bromwich notes herself, she and the Humean have different burdens of proof:

The Humean needs to show that David's affirmative answer is motivated by a conceptually independent desire that is neither entailed by the presence of, nor partially constitutive of, any belief. (Bromwich, 2010: 354)

In contrast, Bromwich needs to show that David's act of answering affirmatively is motivated by the disposition inherent in his belief, not by another mental state external to the belief. In the following sections, I will criticize Bromwich's position and defend the Humean position.

3. No Necessary Connection

Smith (1994), a proponent of the Humean theory of motivation, argues that motivation is not constitutive of belief because in certain circumstances, motivation is obliterated while belief remains unscathed. For example, depressions "can leave someone's evaluative outlook intact while removing their motivations altogether" (Smith, 1994: 120-121). Thus, if an agent is motivated to do anything at all when he believes something, his motivation stemmed not from his belief but from some other source.

Bromwich replies that Smith's contention is at variance with scientific literature on clinical depression according to which depression impairs not only motivation but also belief:

Many studies reveal that depressives *are* cognitively impaired: their depressive episodes are accompanied by irrational thoughts and a tendency to perceive themselves, their surrounding and their future in an unwarrantedly negative light. (Bromwich, 2010: 348)

Psychological studies suggest that motivational impairment is necessarily accompanied by cognitive impairment. It is impossible to remove motivation without destroying belief. Therefore, motivation is constitutive of belief.

In my view, the scientific literature Bromwich cites does not establish that motivation is an essential ingredient of belief. In order for motivation to be constitutive of belief, motivation and belief should not be separated in all possible worlds. What the scientific finding displays is at best that they cannot be pulled apart in the nearby possible worlds where objects abide by the laws of nature. Motivation is not constitutive of belief as long as they come apart in a remote possible world where the laws of nature break down. In other words, it is metaphysical necessity, not nomological necessity, which is required to refute Smith's contention that motivation is not constitutive of belief. The scientific literature exhibits at best the nomologically necessary connection between motivation and belief.

Moreover, Smith's contention can be bolstered by a different example. Imagine that David becomes lethargic as a result of smoking a potent form of marijuana over a long period of time. He does not take a walk even on a beautiful day, always staying in his apartment alone. He does not even want to speak with anyone. One day, Carol visits his apartment and puts knives and forks on the table. At that moment, David's visual faculty works flawlessly. Accordingly, he believes that the knives and forks are on the table. Carol asks whether the knives and forks are on the table. Silence ensues. In this situation, David does not answer her question not because another motivation obstructed the motivation to respond but because he does not have the motivation to answer her question in the first place. Recall that being lethargic, he does not even want to speak with anyone. It does not matter whether the laws of nature allow such an agent to exist or not in this world. What is important is that we can

conceive of such an agent, and as long as such an agent exists in a remote possible world, Smith's point is established that motivation is not constitutive of belief.

Interestingly, recent research in neuroscience suggests that there is not even a nomologically necessary connection between belief and motivation. Some neuroscientists recently discovered that a neural system in a rat's brain is responsible for selecting a single action from multiple alternatives. Signals arise in a region of the rat's brain called the rostral AGm, when the rat makes a decision on what action to choose among multiple alternatives associated with different values:

Our results indicate the involvement of the rostral AGm not only in action selection but also in valuation, which is consistent with the finding that AGm activity is modulated by expected reward. (Jung Hoon Sul et al., 2011: 6)

Their research on the rat's brain suggests that there might be a particular region of the human brain that is also responsible for the decision on what action to choose among different alternatives. For example, signals arise in that region of our brain when we decide to major in philosophy as opposed to English, but signals do not arise when we form the belief that a triangle is three-sided as opposed to two-sided. In short, it is likely that there is a neural difference between our decision on what to believe and our decision on what to do.

The neural difference goes hand in hand with the Humean view that a belief is motivationally inert, but not with Bromwich's view that a belief is motivationally efficacious. For the Humean, motivation is involved when we decide to do something, but not when we decide to believe something. Therefore, it is natural that neural signals pertaining to motivation arise when we decide to do something but not when we decide to believe something. For Bromwich, however, a belief is motivationally potent, so motivation is involved in both the decision on what to believe and the decision on what to do. Therefore, Bromwich's position cannot explain why the neural difference exists.

4. Against Weak Dispositionalism

Bromwich's position, the minimal thesis, originates from what she calls weak dispositionalism according to which a belief disposes an agent to act in a certain way. A successful defense of the Humean view that a belief is motivationally impotent requires the refutation of the argument for weak dispositionalism. In this section, I criticize the argument for weak dispositionalism, which Bromwich states as follows:

Weak dispositionalism: All beliefs have dispositional properties. Weak dispositionalism is widely accepted due to the fact that it is hard to make sense of an agent believing that p but failing to act, think, feel or expect as if it is the case that p, at least when all other things are equal. (Bromwich, 2010: 349).

The following accept weak dispositionalism: H. H. Price (1969), Willard V. O. Quine (1960), Gilbert Ryle (1949), R. B. Braithwaite (1932-1933), Ruth Barcan Marcus (1990), L. Jonathan Cohen (1992), Eric Schwitzgebel (2001, 2002), Robert Stalnaker (1984), Frank Ramsey (1931), Daniel Dennett (1978), Charles Travis (2003), Robert Audi (1994) and Lyn Rudder-Baker (1995). (Bromwich, 2010: 349, footnote)

As her footnote above indicates, Bromwich is in good company. Many eminent philosophers are attracted to the idea that a belief alone has the power to motivate an action. They would endorse Bromwich's minimal thesis for the reason that it is hard to account for an agent

believing that *p* but failing to act as if it is the case that *p*, *ceteris paribus*.

From the Humean point of view, however, it is not hard to account for an agent who acts contrary to his belief. Such an action can be explained in terms of a special desire overriding the standing desire to act in accordance with one's belief. For example, imagine that an agent believes that the earth is round. When asked whether the earth is round or flat, however, he says, "The earth is flat." Why does he speak contrary to his belief? It might be that he is under a political pressure to speak as if he believes that the earth is flat, or that a million dollars is offered to him on the condition that he acts contrary to his belief. The desire to avoid the political persecution or the desire to earn the money overturned the standing desire to answer honestly. This Humean explanation undermines the argument for weak dispositionalism embraced by the many prominent philosophers above.

5. Standing Desire

Recall that the Humean posits the existence of the default desire to answer questions as we believe, and that the default desire is independent of any belief. Bromwich argues that the Humean assumption is illegitimate because it is not true of all human beings. It is implausible that three-year-old children have such a sophisticated desire:

It seems implausible to assume that children have a standing desire to be cooperative conversational partners. Imagine chatting with a three year old. Perhaps you ask the child 'Is that jam on your hands?' and the child in question responds in the affirmative. Is it plausible to assume that this three year old has a standing desire to be a cooperative conversational partner or even a standing desire to play a cooperative conversational game? Clearly not—it is psychologically implausible to suppose that a three year old could have desires with such sophisticated content. And, notice, even if the content is simpler—say, a desire to be honest—it is not clear that very young children have yet fully grasped concepts such as honesty. It is far from clear, then, that we can attribute such standing desires to all human beings. (Bromwich, 2010: 355)

Note that for Bromwich, it is implausible that three-year-old children have the standing desire to be cooperative conversational partners or to be honest because it is not clear that they can have desires with such sophisticated content, and because it is not clear that they have grasped the concepts of being a cooperative conversational partner or of honesty.

In my view, Bromwich's argument that three-year-olds cannot have the desire to be honest because they have not yet grasped the concept of honesty is invalid. We can think without understanding what it is to think. Grasping the concept of thinking is not needed in order to think. Similarly, children can have a standing desire to answer honestly without understanding what it is to answer honestly. To put it another way, grasping the concept of honesty is not required in order to have the desire to answer honestly. In general, we do not need a second-order mental state in order to have a first-order mental state. After all, if we need the second-order mental state in order to have a first-order mental state, we would also need a third-order mental state in order to have the second-order mental state, and we would not even be able to have the first-order mental state due to the problem of infinite regress. In short, three-year-olds may not know what it is to be cooperative conversational partners. It does not follow, however, that they do not have the desire to be cooperative conversational partners.

How about Bromwich's argument that three-year-olds cannot have the standing desire to be cooperative conversational partners because it is too sophisticated for them? An evolutionary consideration speaks against her argument. Some evolutionary psychologists

maintain that a sense of morality has evolved by natural selection. It was selected for in the past because it promoted cooperation between individuals, and because the cooperation increased the chance of propagating individuals' genes:

The constellation of thoughts and feelings that constitute a sense of morality evolved to enable individuals to uphold cooperative social relations that maximized their biological benefits. (Krebs, 2008: 168)

The sense of cooperation is in our genes. It is a heritable characteristic that has been transmitted to us from our ancestors. Cooperation is hard to come by without the honest exchange of information between individuals. To exchange information honestly is to be a cooperative conversational partner. Therefore, it is plausible that three-year-olds have a sophisticated desire to be cooperative conversational partners, contra Bromwich.

Suppose that Bromwich is right that three-year-olds cannot have the desire to be cooperative conversational partners because it is too sophisticated for them. Then, this criticism against the Humean theory of belief backfires on Bromwich's own theory of belief. Recall that her minimal thesis holds that to believe that *p* involves to be disposed to answer affirmatively the question: Is it the case that *p*? The disposition to answer the question in that manner is more sophisticated than the desire to be cooperative conversational partners. Therefore, three-year-olds cannot believe, for example, that an apple is red.

6. Cognitive Dissonance

Bromwich claims that "the literature on cognitive dissonance gives us reason to favour the minimal thesis over the Humean theory of motivation" (2010: 360). Recall that the minimal thesis holds that if a subject believes that *p*, he would say yes *ceteris paribus* to the question: Is it the case that *p*? In order to evaluate her assertion, we need to know what psychologists say about cognitive dissonance. Festinger and Carlsmith, whom Bromwich cites, ask an interesting question: What will happen to "a person's private opinion if he is forced to do or say something contrary to that opinion?" (Festinger and Carlsmith, 1959: 203) Suppose, for example, that you performed a repetitive and tedious task. As a result, you believe that the task was boring and monotonous. But you are offered a certain amount of money and asked to say to others that the task was interesting. Consequently, you say to them that the task was enjoyable. You said something contrary to your belief. In such a situation, Festinger and Carlsmith note, you suffer from cognitive dissonance, a kind of psychological discomfort, and then replace your previous belief with a new belief that accords with what you said or did. Your new belief in the above case is that the task was really interesting. As a result, cognitive dissonance is resolved and cognitive consonance returns.

Why does acting contrary to one's belief cause cognitive dissonance? Bromwich's explanation is that "acting contrary to one's belief causes cognitive dissonance because to believe that *p* is to be disposed to act as if it is the case that *p*..." (2010: 360). The idea seems to be that cognitive dissonance originates from the conflict between what your belief disposes you to do and what you actually do. The clash between the belief and the action gives rise to the cognitive dissonance and then to the revision of the previous belief. You thereby form a new belief and regain cognitive consonance. Notice that for Bromwich, cognitive dissonance arises because of the conflict between the old belief and the action.

It seems to me, however, that the Humean has an alternative explanation of cognitive dissonance, and that it is at least as plausible as Bromwich's. We have a standing desire to speak and act in accordance with our belief. Cognitive dissonance arises when there is a collision between the standing desire and a special desire that we have in a particular

situation. The special desire in the above case is the desire to make money in return for saying that the task was interesting. The clash between the standing desire and the special desire leads to the revision of the previous belief. When the belief is revised, cognitive consonance is restored. Note that the old belief is replaced with the new belief not because of the conflict between the old belief and the action but because of the conflict between the standing desire and the special desire. The standing desire and the special desire are both independent of the old belief and the new belief. Therefore, Festinger and Carlsmith's cognitive dissonance theory in psychology does not favor Bromwich's theory of belief over the Humean theory of belief, contrary to what Bromwich claims.

7. Vacuity

Recall that for Bromwich, David says yes to Carole's question because he believes that the knives and forks are on the table, i.e., he is disposed to act as if it is the case that the knives and forks are on the table. The belief is motivationally efficacious, so it by itself can generate the action of answering the question. In consequence, the desire to answer the question honestly is not needed to explain why David answers it affirmatively. Notice that in Bromwich's explanation of David's verbal behavior, the explanans is the disposition to answer affirmatively, and the explanandum is the act of answering affirmatively. Thus, her explanation has the form: An agent does X because he is disposed to do X.

A problem with Bromwich's explanatory scheme is that any action can be explained in that manner. For instance, David is sleeping now because he is disposed to sleep. The glasses break into pieces because they are disposed to break into pieces. These explanations are almost vacuous, casting no interesting light on why the phenomena occurred. Likewise, Bromwich's explanation is also almost vacuous that David answers Carole's question affirmatively because he is disposed to speak as if it is the case that the knives and forks are on the table. It does not shed new light on why David answers in an affirmative manner. Such an explanation verges on triviality.

8. Third Factor

There is another problem with Bromwich's contention that "the belief alone explains the action" (2010: 352). In general, a disposition cannot generate an action alone. A third factor is needed for the disposition to bring about the action. For example, in addition to being disposed to break into pieces, the glasses need to be dropped to the ground from a high place in order to break into pieces. The disposition of the glasses alone cannot generate the event of the glasses' breaking into pieces. Similarly, being disposed to answer a question honestly alone cannot generate the action of answering a question honestly, i.e., a belief alone cannot generate an action, so the belief alone cannot explain the action. Hence, the explanation of an action invoking only a belief is incomplete.

Bromwich might reply that an agent answers a question honestly because his belief disposed him to do so, and he was asked the question. Being asked the question is the third factor that contributed to the generation of the answering act. A problem with this move is that it is saddled with the assumption that being asked the question does not cause a mental state which in turn activates the disposition of the belief. Once Bromwich invokes the mental state, she has to give up her previous contention that a belief alone is enough to motivate an action, and she opens the door to the Humean view that a desire needs to be invoked in addition to a belief to explain an action.

9. Independence

In this section, I argue that the disposition to answer honestly is separate from belief. Consider that we are genetically disposed to feel that snakes are repulsive. We have the standing disposition to shy away from a snake, although we have never seen one before. The disposition is manifested when we see a snake. Thus, the disposition stemmed not from the belief but from our genes. An evolutionary story can be given of why we have the innate disposition to stay away from a snake. Our ancestors acquired the disposition after a series of variations in the distant past. The disposition was advantageous for their survival and reproduction, especially in forests. Given that some snakes were poisonous, individuals with the disposition were more likely to enjoy longevity and fecundity than those without. Eventually, the disposition became genetically encoded in our ancestors. As a result, it is innate in us now. The innate disposition is defeasible. It can be obstructed by a stronger opposing motive in a particular situation. For example, we may not step back from a snake, once we are told that the snake is not poisonous and that we will be given a million dollars provided that we do not step back.

Analogously, we are genetically wired to answer honestly when we are asked questions. An evolutionary explanation can also be given of why we have this innate disposition. Our ancestors acquired the disposition due to a series of variations in the distant past. It raised the viability and fertility of our ancestors. Imagine a society where individuals have the default disposition to answer honestly and another society where individuals have the default disposition not to answer at all or to answer dishonestly. It is clear that the first society has the better chance to perpetuate itself than the second. After all, where there is no honest exchange of information, there is no cooperation and, hence, no prosperity. In short, the genes responsible for the default disposition enhanced the fitness of our ancestors, and we inherited the innate disposition from our ancestors. The innate disposition exists temporally prior to, hence independently of, any belief that we acquire after we are born. Like the disposition to step back from a snake, the disposition to answer honestly is defeasible. It can be overridden by a more forceful, opposite reason in a particular situation. For example, we may not answer a question as we believe if we are angry at our questioner. In any event, the disposition to answer honestly is extrinsic to any belief we form after we are born, *pace* Bromwich.

The foregoing evolutionary story suggests that dispositions in general originate by and large from genes, whereas beliefs originate by and large from the environment. Let me bolster this idea with the following considerations. First, it is a fact of our daily life that different people exhibit different behavioral dispositions but converge on the same belief, when they are exposed to the same stimulus. For example, David and Carole see a beautiful woman on the street. They have the same belief that a beautiful woman is in front of them, but they have different dispositions: David is disposed to flirt with her, while Carole is disposed to guard against her. They have these different dispositions because they have different genetic properties.

Second, we may have different dispositions, but we typically possess the same belief at different stages of our life. For instance, when children and adults are listening to a fairy tale, they have the same belief that they are listening to the fairy tale, but they have different dispositions. The children are disposed to continue to listen to it, but the adults are disposed to do something else, e.g., reproducing. Why do they have different dispositions? Genes programmed human beings to have different dispositions at different stages of life. Consequentially, children have a predilection for fairy tales, and adults for reproduction-related activities. Thus, what we are disposed to do is largely determined by our genes, whereas what we believe is largely determined by stimuli from the environment.

Third, dispositions are hereditary traits that can be passed from one generation to the

next, but beliefs are not. My father has the cognitive disposition to make an inference from one belief to another and the phenomenal disposition to be surprised when his belief is disconfirmed. I inherited those dispositions from him. In contrast, he believes that his mother was great, but I do not. He and I have similar dispositions, because we are genetically similar, but we have different beliefs, because we were exposed to different stimuli. Thus, genes are largely responsible for dispositions, whereas stimuli are largely responsible for beliefs. It follows that if you want to know what others are disposed to do, it is useful to investigate what their parents were disposed to do. In contrast, if you want to know what others believe, it is useful to investigate what stimuli they were exposed to.

Finally, the Humean theory of belief can neatly account for our belief-forming processes, but Bromwich's theory of belief cannot. Bromwich's theory holds that the disposition to answer honestly is inherent in a belief. Thus, the content of the belief that the earth is round embeds the dispositional content "Reply affirmatively to the question: Is it the case that the earth is round?" This suggestion, however, does not match up with what goes on in science classes. No teacher says to his students "The earth is round. Answer affirmatively to the question: Is it the case that the earth is round?" in order to help his students to form the belief that the earth is round. Teachers only say to their students that "The earth is round." The Humean explanation of what goes on in the science classes is that students have the innate disposition to answer honestly, so it is superfluous to add "Answer affirmatively to the question: Is it the case that the earth is round?"

10. Conclusion

What we are disposed to do is largely determined by our genes, whereas what we believe is largely determined by stimuli from the environment. The standing disposition to answer questions honestly *ceteris paribus* is innate like other dispositions, such as the behavioral disposition to shy away from a snake, the cognitive disposition to make inferences, and the phenomenal disposition to be surprised. We genetically inherited these dispositions from our ancestors. In contrast, we acquire beliefs from the environment, and we cannot genetically convey beliefs to future generations. Since dispositions and beliefs have different origins and incompatible properties, they are separate mental properties, contrary to what many philosophers assert in the meta-ethics literature. Besides, the neural findings pertaining to the rat's brain support the Humean view that motivation is extrinsic to belief.

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