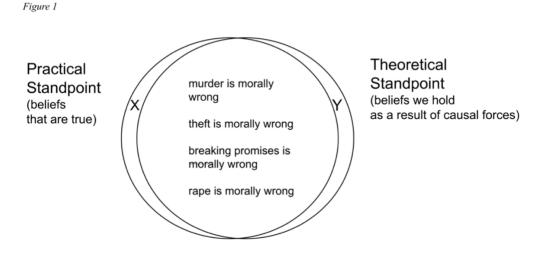
### **Street's Striking Coincidence: In Defense of Rational Reflection Explanation**

Normative realism contends that at least some moral facts are mind-independent: they hold independently of one's evaluative attitudes. For example, torturing an innocent person for fun is morally wrong is true regardless of whether anyone believes it is wrong. Sharon Street (2016) argues that a normative realist who (1) believes that their moral beliefs are by and large true and (2) accepts that their moral beliefs are brought about by causal forces needs to provide an explanatory account of the relationship between (1) and (2). I respond that rational reflection allows us to distinguish between true and false beliefs and therefore explains why our causally produced beliefs may be true. In this paper, I examine and refute Street's objections, and show that Rational Reflection Explanation is epistemically satisfactory.

## **Street's Demand for Explanation**

On Street's account (2016), I can view my normative beliefs as an ordinary moral agent from two different standpoints. From the *practical* standpoint, I may see myself as someone whose normative judgments are by and large true (Street, p. 294). For example, I hold that eating an animal's flesh is morally wrong since it causes completely avoidable suffering to sentient beings. Similarly, I believe that racism is wrong since it fails to treat people as possessing equal dignity. The reason why I am committed to these beliefs (and act accordingly) is that I think they reflect objectively true moral facts – not because they are socially expedient or flattering to me personally.

By contrast, from the *theoretical* standpoint, I take it that my normative commitments are a product of causal forces, involving a wide spectrum of socio-economic and evolutionary factors (Street, p. 294). Consequently, I accept that had I been born in a different culture or epoch, my views on, for example, veganism may well have been different. Street argues that if I accept both standpoints, then I am committed to the claim that moral facts and the beliefs I hold as a result of causal forces overlap to a considerable extent. To illustrate, consider the diagram below:



In Figure 1, X represents a set of true normative claims, whereas Y represents a set of normative claims that I hold as a result of causal forces. Y includes, for instance, the beliefs that murder, theft, and rape are morally wrong. Plausibly, X contains these beliefs as well, as reflected by the substantive overlap between the two sets of normative claims. Street argues that to subscribe to both standpoints is, implicitly, to agree that (1) my accepting the belief that murder is wrong is a product of evolutionary and cultural processes and that (2) murder is morally wrong in the full-blown realist sense that it is morally wrong independent of my attitude.

Street claims that the perspectival overlap gives rise to the following question: How did it happen that the set of normative beliefs produced in me by causal forces and the set of normative facts coincide to such a degree? The fact that X and Y overlap so extensively seems like a "striking coincidence" (Street, p. 205), since there is a great number of possible normative frameworks that causal forces could have produced instead. For example, had evolution favored different traits (e.g., had we evolved along the lines of insects), we would have considered it

obligatory to always sacrifice our individual interests for the sake community (Street, p. 120). Similarly, had I been born in some prehistoric tribe, I might have believed cannibalism is morally permissible. In short, the number of possible normative frameworks is so great that the probability of ending up with largely true beliefs is extremely low.

Despite the existence of a wide range of possible normative beliefs an ordinary moral agent might have endorsed, the ones that are true happen to be the ones we on the whole subscribe to. This, according to Street, demands some kind of explanation. Nevertheless, she does not specify the kind that is needed. Street observes that the explanation may be "causal, normative, philosophical or of any other particular type" (Street, p. 306). (It could even turn out that the mooted explanation is obvious and banal.) In this paper, I provide an explanation of the moral realism kind, compatible with Street's open-ended challenge.

#### In Search of an Explanation: Rational Reflection

To answer Street's demand for an explanation, I argue that the overlap between X and Y is explained by appealing to the idea of rational reflection (Rational Reflection Explanation). Put simply, I claim that, as rational creatures capable of analyzing and synthesizing our beliefs, we are far from being passive receivers of whatever culture or evolution makes us believe. Suppose that one of the moral beliefs in Y is that persons ought to be treated as autonomous individuals (the Autonomy Principle). Having acquired such a belief, I can perform the following schematic deduction, to the effect that slavery is morally wrong:

- 1. A person ought to be treated as an autonomous individual
- 2. To treat someone as autonomous means treating them as self-governing.
- 3. To enslave a person is to fail to treat them as self-governing.

- 4. So, to make someone a slave is to fail to treat them as autonomous.
- 5. Therefore, we ought not enslave a person.

By supposition, we accept (1) in virtue of causal forces operating on an evolutionary or social scale. (2) unpacks the semantic content of (1). (3) is a non-evaluative fact; what one needs to know is the non-normative conceptual nature of slavery (that is, we need to know what slavery consists in, but not whether it is wrong or right.) (4) follows from (2) and (3) by simple contraposition. The conclusion (5) follows from (1)–(4).<sup>1</sup>

By performing the deduction above, we are able to expand the overlap between X and Y. As it turns out, X and Y contain not only the belief that one's autonomy must be respected, but also the normative belief that slavery is impermissible. A similar kind of deduction could be performed by combining two moral beliefs together. For example, a belief that all genders are equal, and a belief that women deserve respect, implies that men also deserve respect. In sum, we might perform such deductions repeatedly to obtain the kind of overlap between X and Y represented in Figure 1 (or something close to it).

However, it must be said that even if this proposed solution works, it is still not obvious why we should think that it is true. One reason is that the process I described is compatible with different interpretations of moral change throughout human history. For example, Steven Pinker (2001) provided some evidence that genocide in primitive societies was more common than in the modern world and that with time, violence in the world declined. Similarly, Peter Singer (1981) observed (what he calls) an expanding circle of moral concern: as time passes, people

<sup>&</sup>lt;sup>1</sup> The way in which (5) follows is more complicated, involving deontic logic. But for our purposes, the presented deduction will do.

recognize that their obligations are not limited merely to their family, tribe, or race, but may extend to all human beings (and further beyond, to non-human animals). In a similar vein, Michael Huemer (2016) provided an interesting survey of literature indicating the increasing popularity of liberalism throughout human history. These empirical and philosophical perspectives fit well with the method of moral deduction I sketched out above. The view that emerges is that causal forces provided us with a set of random beliefs, on which we applied the tools of rational reflection; consequently, violence in the world declined, and we accepted liberal principles. In other words, we arrived at true moral beliefs.

# **Street on Rational Reflection**

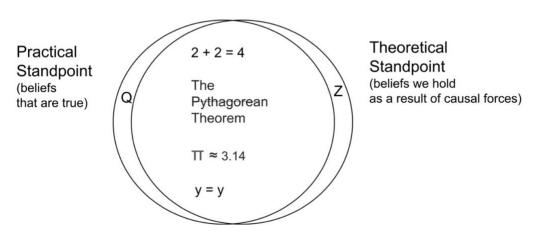
Street (2006) seems to be aware of this kind of objection. Interestingly, she admits that rational reflection might play a role in the composition of Y. She agrees that, besides cultural and evolutionary factors, there is also rational reflection, allowing us to synthesize and compare different beliefs (Street, p. 114). Street might very well accept the existence and utility of the kind of deduction I described above. In actual fact, we compare our normative beliefs just as we do non-normative facts. Nevertheless, Street might still object that rational reflection does not explain why the beliefs in Y are true. After all, the process of deduction is useful only if we assume that the beliefs from which we deduce further principles are correct. However, if, for example, the Autonomy Principle is false, then all the beliefs I deduce from it (for instance, that slavery is morally wrong) are equally false.

So, is the Autonomy Principle true? Rational reflection cannot answer this question (at least not without making normative assumptions). After all, rational deliberation does not operate in the manner of a metal detector which informs us automatically whenever we come across the right belief by sheer chance. Rather, rational reflection provides us with epistemic tools (including deduction, comparison, synthesis, and a plethora of other methods) to analyze the beliefs we hold in terms of other normative beliefs we happen to possess. Yet considering the alternative possible beliefs we might have endorsed, it appears, once again, a priori unlikely that the beliefs we actually hold manage to be true. One might object that even though rational reflection is an important factor in the acquisition of moral belief (since it partly explains why we hold the beliefs we hold), it does not explain why it happens that the beliefs we hold are correct.

## **Mathematical Challenge**

In this section, I will argue that if we cannot rely on rational reflection to justify our normative beliefs (since our most basic moral commitments are most likely incorrect) then we cannot use rational reflection to justify our mathematical beliefs either. Street's demand is, therefore, too demanding. To illustrate, consider the following sets:

Figure 2



As in Street's Challenge, we are dealing with two sets, Z and Q. Z represents the set of mathematical beliefs I happened to hold as a result of casual forces. For example, I believe that the value of pi is approximately 3.14, not least since I learned it from a math textbook at some point and have heard it reiterated many times. More generally, I possess certain mathematical beliefs as a result of evolutionary forces (Butterworth, 1999; Dehaene, 1997). Selective pressures

acted upon my cognitive faculty in such a manner that I and other members of my species can recognize the diameter of a circle in a particular way. At the same time, I believe that it is objectively the case that the value of pi is approximately 3.14 (regardless of what anyone believes, of how they come to know it, of impinging evolutionary forces, etc.). Thus, we may take it that Z and Q by and large overlap. (We cannot expect to see perfect overlap since many people are ignorant or mistaken about certain mathematical facts.) The question that arises in this context is this: How did it happen that the mathematical beliefs that causal forces provided me with also happen to be true? After all, contingent causal factors might have differed: the textbook might have been wrong, our high school teacher might have lied to us, etc.

One obvious answer is that we might appeal to rational reflection to determine whether the mathematical beliefs we are provided with are true. For example, we can determine that the value of pi is approximately 3.14 by simply calculating the ratio of the circumference of a circle to its diameter.

But one might respond (inspired by Street's objection from the previous section) that rational reflection cannot help us assess mathematical beliefs; after all, if our most fundamental beliefs about mathematics are false then we will simply use our thinking abilities to analyze false beliefs in terms of other false beliefs. If, for example, it is false that multiplication and division must be done before addition and subtraction, then my calculating abilities will be of almost no use. I can use rational reflection to calculate that  $1 + 2 \ge 3 = 7$  only if I assume that the rule is true. But why should I think that the most fundamental mathematical axioms and rules I hold are true? Rational reflection does not notify me: "You just encountered a true mathematical belief?" It only allows me to analyze mathematical beliefs on the basis of other mathematical beliefs. Hence, our rational reflection seems to have no use when it comes to providing a satisfactory

explanation; consequently, it is a striking coincidence that the mathematical beliefs we hold as a result of causal forces also happen to be the right ones.

The upshot of the challenge is that if we are not allowed to appeal to rational reflection as an explanation of why the moral beliefs we happen to hold are true, then we should not be allowed to use rational reflection to justify mathematical knowledge either (since in both cases we do not know whether our basic axioms and starting beliefs are true). But it is absurd to believe that we cannot use rational reflection to determine the value of pi. Hence, it must be equally absurd to say that we cannot use rational deliberation in case of normative beliefs.

In sum, the general form of Street's challenge is equally problematic for other forms of knowledge (e.g., mathematics); hence, Street's demand is too demanding. (Note that there are reasons to think that the argument I provided is unsatisfactory; I will consider these later.) Setting aside this point, I now proceed to offer the required explanation of moral facts and moral beliefs.

### **Rational Reflection as a Substantive and Constitutive Explanation**

Street might agree quite generally that in many fields of knowledge we need to assume certain starting points; otherwise, rational reflection is of no help. Nevertheless, mathematics differs from ethics. Mathematics is amenable to what Richard Chappell (2012) calls a constitutive explanation, whereas for ethics we possess only substantive explanations.

In the first subsection, I explain the difference between constitutive and substantive explanations. I argue that in the case of mathematics we can provide a constitutive explanation, whereas in the case of morality we must resort to an appeal to rational reflection, that is, to a substantive explanation. I then show why, according to Street, the constitutive explanation is preferable to the substantive one. Lastly, I show that my Rational Reflection Explanation can be revised in an epistemically satisfactory manner.

#### **Substantive and Constitutive Explanations**

A substantive explanation involves assuming that some particular claims within the target domain of explanation are true to show how our cognitive faculties arrive at such truth (Chappell, p. 10; Street, pp. 321–322). Suppose I try to prove that my surroundings are the way I perceive them to be, by simply observing the existence of chairs, tables, and beds. Chairs, tables, and beds are part of my manifest surroundings; in other words, they are objects within target the domain. By remarking: "Look, reality is the way I perceive it because there really are chairs and tables!", I thus aim to provide a substantive explanation.

By contrast, when we provide a constitutive explanation, we do not make immediate assumptions about particular objects within the domain; rather, we make an assumption regarding the general nature of the objects within the domain in question (Chappell, p. 10; Street, pp. 319–320). For instance, Street holds that perceived surroundings are the way we perceive them owing to the causal nature of physical objects. The causal powers of objects in our immediate environment are apt to affect our evolutionary fitness. Therefore, we have a reason to think that selective pressures shaped our mental faculties in such a way that we recognize objects for what they are. Note that Street's argument does not assume the existence of particular objects such as chairs, tables, etc., but relies upon general assumptions about the causal nature of physical objects.

## Substantive and Constitutive Explanation in Ethics and Mathematics

The proposed appeal to rational reflection can be interpreted as a substantive explanation. In the illustration I gave, it is reasonable to claim that causal forces provided a true "autonomy principle" which allowed for the use of rational reflection. In other words, as befits a substantive explanation, one assumes certain claims within the normative domain to explain subsequently how we arrive at the true moral beliefs. By analogy with the perceptual case, it is as if we were to assume the existence of chairs and tables to prove that they exist. (Moreover, I claim that we can use rational reflection to deduce additional principles from such beliefs, but as I argued before, without such fundamental beliefs, rational reflection is without a point.)

In the case of mathematics, however, Street might provide a constitutive explanation: instead of appealing to rational reflection, she might make a general claim about the mathematical domain. For example, she might say that mathematical propositions are such that their application facilitates our survival. After all, technological and scientific discoveries build upon a basic grasp of mathematical facts. At the most basic level, an individual who is unable to calculate the number of hyenas in front of him would (presumably) have a lower chance of survival than someone who can. Suppose that Tom believes that 1 hyena + 1 hyena = 0 hyenas, while Jack believes 1 hyena + 1 hyena = 2 hyenas. It seems obvious that when encountering a pair of hyenas, Jack will be more likely to survive than Tom. Generally speaking, to ensure survival selective pressures formed cognitive faculties in such a way that if we attempted to calculate the number of dangerous predators facing us, our calculation would most likely be correct.

It is important to notice that when I claim that mathematical propositions are such that their application makes our survival more probable, I am not making any immediate assumption about particular propositions within the domain in question. In other words, I am not assuming that particular equations (e.g., 2 + 2 = 4) or formulas are true. But, once again, I am making a general assumption about the survival-promoting nature of mathematical propositions.

## Why the Explanatory Demand is not too Stringent

So far, I have argued that the mooted Rational Reflection Explanation constitutes a substantive explanation; in the case of mathematics, however, we can provide a constitutive explanation. The distinction is crucial since Street believes that constitutive explanations are epistemically satisfactory, whereas substantive explanations are not. In case of a substantive explanation, we are providing nothing more than "empty replies" (Street, p. 321). In other words, substantive explanations provide us with "no reason" whatsoever to think that claims within a certain domain are true (Street, p. 321). According to my proposed Rational Reflection Explanation, one comes to believe certain basic claims are true, whereupon one uses rational reflection to ascertain their truth. To illustrate, this response seems to amount to the following paraphrase: "Look, the fact that murder is wrong is true! And you can use your reason to see that it is true!" In the case of constitutive explanation, by contrast, the response is more informative, since it does not assume that particular claims are true but rather shifts attention to the general nature of such objects. In this form, the response still appears to be question-begging, but not trivially question-begging. With respect to mathematics, someone who already accepts the truth of a mathematical domain is given an internal reason (at the very least) to think that mathematical beliefs are true. In case of a substantive explanation, we are, once again, provided with no reason at all.

The upshot of the above discussion is that we may rely on our judgement in the case of mathematics, but this is because we have a constitutive explanation of why our mathematical beliefs are true. In the case of ethics, however, we lack a constitutive explanation. We have no choice but to have recourse to an explanation that immediately assumes certain claims within the domain – a far from epistemically satisfactory predicament. Thus, the mathematical challenge

fails: Street's demand is not excessively stringent. Insofar as Street merely calls for an explanation of some form, begging the question is permissible, provided that the explanation is constitutive. In the case of normative ethics, we lack such an explanation, whereas in the case of other fields of knowledge (e.g., mathematics) we do not.

#### **Rational Reflection Explanation as a Constitutive Explanation**

Nevertheless, I believe that Rational Reflection Explanation may be put in a form of a constitutive explanation, as opposed to a substantive one. More specifically, we can propose a Revised Rational Reflection Explanation (RRRE) stating that moral beliefs are such that rational reflection can categorize them into true and false moral beliefs. It is worth noting that RRRE makes no assumption regarding specific moral judgments ((RRRE) does not state that "murder is morally wrong" or that "helping those in need is morally good", etc.). To bring this closer to Street's formulation, RRRE is not of the form "*X*, *Y*, and *Z* are valuable" (Street, p. 332). Rather, RRRE is a general claim about the nature of a proposition within the normative domain: namely, normative claims are such that rational reflection can categorize them based on their truth value. It is also important to notice that RRRE does not make an explicit assumption that we know which propositions are false and which are true. Rather, the claim is that rational reflection is capable of determining whether normative propositions are true. (It might turn out that RRRE is true, although we do not know whether our moral beliefs are true since we lack rational reflection or are incapable of using it).

Now, I believe that most of us possess rational reflection. The fact that you are reading and analyzing this paper right now indicates that you are capable of using it. (At the same time, I acknowledge that not all people in all circumstances are capable of using rational reflection. However, this is not a problem for my account, since in such cases I freely grant that the individual does not have a reason to think that their normative beliefs if they have any, are true).

Thus, we have an explanation of why the beliefs we hold as a result of causal forces also happened to be true. Evolution and culture provided me with a certain set of beliefs, and I then used my rational reflection to reject the false ones and keep the true ones.

If my reasoning is correct, then constitutive explanations might be provided for both the normative and mathematical domains. This shows that our Revised Rational Reflection Explanation is epistemically satisfactory, and Street's call for explanation is met, or else we cannot explain why we hold mathematical beliefs either.

However, one concern is that my response is not sufficiently informative. Conceivably, some might be satisfied with this state of affairs. Imagine someone who does not recognize that morality is a matter of rational deliberation. They do not recognize that by using different tools of comparison and synthesis we can determine whether a moral proposition is true. In such cases, it is obvious that **RRRE** will give them reasons to accept the explanation as valid.

If the skeptic goes on to ask: "How does rational reflection enable us to know which beliefs are true?", I will have to respond that rational reflection determines what beliefs are true, since it takes a certain evaluative standpoint. This is the tacit assumption that my argument makes; that is, I assumed that the set of normative beliefs I hold is true. In other words, I assumed, without an argument, that murder is morally wrong. If we do not make this tacit assumption, then we are left with a mysterious concept of rational reflection determining what is true and what is false.

This, however, is not a problem, since in the case of mathematics we deal with a similar tacit assumption. How do I know that mathematical judgments are such that if true, they promote

my survival? The answer is that I know it because I assumed that the mathematical beliefs I hold are true. On examining the nature of such beliefs, I went on to make a general claim about true mathematical beliefs (namely, their application facilitates human survival) to satisfy Street's epistemological requirements. Without this tacit assumption, the argument reduces to postulating special access to knowledge about mind-independent mathematical truth. The special access claim is as mysterious as the claim that rational reflection can autonomously distinguish moral truth from falsehood.

## Conclusion

This paper began with a simple argument that rational reflection explains why the beliefs we hold as a result of causal forces happen to be largely true. I initially agree with Street that rational reflection fails as a satisfactory explanation. In assessing whether a particular action is morally wrong, our deliberative judgements proceed from a certain evaluative standpoint. Without assuming certain normative beliefs, rational reflection seems to lack a point. Given these shortcomings inherent in the Rational Reflection Explanation principle, I observed that the call for an explanation, rather than the form of the explanation, may be philosophically suspect. If we try to show in an analogous fashion why our mathematical beliefs are true, then we find that we have to assume certain fundamental beliefs. It follows that Street's explanatory demand is too stringent. In the second part of the paper, I sought to defend Street against the objection just canvassed by adverting to her distinction between constitutive and substantive explanations. I argued on her behalf that, in the case of mathematics, we might provide an epistemically satisfactory constitutive explanation; hence, we do have a reason to hold that our mathematical beliefs are true. While the response might seem attractive, as I have shown, we can revise the Rational Reflection Explanation so that it meets Street's epistemic requirements; that is, we

might put the explanation in constitutive form, also. My account, which tries to deal with the striking coincidence observed by Street, turns out to be as plausible an explanation in the case of ethics as it is in the case of mathematics. Both explanations beg the question and are equally informative. Most importantly, both explanations meet Street's epistemic requirements. If this is indeed the case, then rational reflection is a plausible explanation for why the beliefs we hold as a result of casual forces also happen to be true.

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