



EVOLUTIONARY THEORY, MORAL JUSTIFICATION, AND MORAL REALISM¹

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ABSTRACT. Does evolutionary theory have the potential to undermine morality? In his book *The Evolution of Morality*, Richard Joyce (2006) argues for a positive answer. He contends that an evolutionary account of morality would undermine moral judgements and lend support to moral scepticism. I offer a critique of Joyce's argument. As it turns out, his case can be read in two different ways. It could be construed as an argument to establish a general scepticism about the justification of moral judgements. Or it could be read as an argument that targets only a particular meta-ethical position, namely moral realism. My claim is that it fails on both interpretations. There is no reason to believe that evolutionary considerations undermine morality.

KEYWORDS. Evolutionary theory, Evolutionary Debunking, Moral justification, Moral Realism, Moral Facts.

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Daniel Dennet (1995) holds that Darwin's theory of evolution is a "universal acid; it eats through just about every traditional concept and leaves in its wake a revolutionized world-view, with most of the old landmarks still recognizable, but transformed in a fundamental way"². Can moral concepts and our thinking about morality more generally be protected from its 'corrosive power'?

In his book *The Evolution of Morality*, Richard Joyce (2006) provides a negative answer to this question. He claims that an evolutionary account of morality would undermine moral judgements and lend support to moral scepticism. He sees his case for this claim as an "evolutionary debunking of morality"³.

In the following, I offer a critical analysis of Joyce's argument. As I will explain shortly, the argument can be read in two different ways. It could be construed as an argument to establish scepticism about the justification of moral judgements more generally. Or it could be read as an argument that specifically targets only a particular meta-ethical position, namely moral realism. My claim is that it fails on both interpretations. There is no reason to believe that evolutionary considerations undermine morality.

I begin with an exposition of Joyce's argument before scrutinising and rejecting the two different readings of his case. I end with a brief summary of my discussion.

1 The 'evolutionary debunking' argument

Joyce claims that an evolutionary account of morality would undermine moral judgements. He starts his argument with the following thought experiment. Suppose there are such things as 'belief pills', pills that, once you have taken them, will lead you to form a particular belief. Suppose that one of these pills induces the belief that Napoleon lost the battle of Waterloo. Now imagine that you proceed through life believing that Napoleon lost at Waterloo, but suddenly you come to know that in your past someone surreptitiously put a belief pill in your tea and your belief about Napoleon's losing at Waterloo is the product of the pill. In Joyce's view, the knowledge about the origin of your belief should undermine your faith in it. For the way you acquired the belief is entirely independent of the truth of the belief. He holds, "unless you can find some concrete evidence either in favour or against the belief you should cease to believe" that Napoleon lost at Waterloo⁴.

With this thought experiment in mind, Joyce turns to the evolution of morality. He argues that an evolutionary account of morality would undermine one's moral beliefs in the same way as discovering that one has taken the mentioned 'belief pill' would undermine one's view about Napoleon's losing at Waterloo. To support his claim, Joyce first holds that the best evolutionary account of morality will be a version of the thought that moral judgments in early humans had the function of strengthening evolutionarily advantageous social behaviour. He then contends that to be selected for encouraging social behaviour, moral judgements such as 'x is wrong' or 'y is good' did not necessarily have to pick out some mind-independent or objective moral facts such as 'goodness' or 'wrongness' in the world. In his view, there is no reason to assume that promoting social behaviour and detecting moral facts in the world had to fall together. Furthermore, there is no reason to assume that natural selection is a truth tracking mechanism. In fact, Joyce argues that moral judgement evolved independently of

²(Dennet, 1995, p. 63).

³(Joyce, 2006, p. 192).

⁴(Joyce, 2006, p. 180).

whether the moral fact necessary to render the judgment true obtained in the world or not⁵. Consequently, our moral judgments could be true. But since, for all we know, natural selection could also have been entirely ‘off-track’, our moral judgements could equally well be false. For Joyce, we do not seem to have any justification for holding the former and rejecting the latter. He concludes, “once we become aware of this genealogy of morals, we should [. . .] cultivate agnosticism regarding all positive beliefs involving [moral] concepts until we find some solid evidence either for or against them.”⁶.

Joyce’s argument can be summarised thus:

- (1) Our moral judgements have an evolutionary history.
- (2) This evolutionary history suggests that they did not evolve to track objective moral facts.
- (3) Thus, our justification for holding that our moral judgements are true is undermined.

2 A critical analysis of the argument

Is this argument tenable? A first point to note is that Joyce makes the implicit meta-ethical assumption that moral judgements derive their truth and justification from their reference to objective moral facts in the world. That is, Joyce presupposes that moral realism – the view that moral properties represent objective facts of the world and moral judgements are made true or false depending on whether the objective facts or states of affairs obtain as the judgements purport or not⁷ – is the correct explanation of meta-ethical discourse.

One can diagnose this assumption in the following way. As mentioned, Joyce claims that his genealogical account would render our moral beliefs unjustified because it suggests that these beliefs did not evolve to detect objective moral facts. For his argument to succeed he needs to presuppose, conversely, that the only thing that does render moral beliefs justified and true is their reference to such moral facts. The argument is based on the assumption that reference to these facts constitutes the *sole* way of justifying moral judgements.

However, Joyce’s assumption is mistaken. There are other ways of deriving a justification for moral judgements. For instance, one alternative that does not involve committing oneself to mind-independent facts is constructivist in nature. Moral constructivists (e.g., John Rawls and Thomas M. Scanlon) do hold that moral claims have descriptive content and refer to facts of the world. But unlike for the moral realist, for the constructivist these moral facts are not mind-independent. Rather, they are dependent upon people’s beliefs and attitudes. For instance, for constructivists, right and fair moral principles are those principles that rational agents would under appropriately restricted conditions agree upon⁸. The agreement among these agents represents the source of justification for moral judgments. Thus, since reference to objective moral facts is not the only approach to grounding moral beliefs, the meta-ethical assumption that underlies Joyce’s argument can be rejected.

However, Joyce could respond that the suggested constructivist approach fails to account for a crucial feature of moral judgements. In his view, moral judgements are imbued with “practical clout” or “oomph”, i.e. they “draw attention to a deliberative consideration that

⁵(Joyce, 2006, p. 131).

⁶(Joyce, 2006, p. 181).

⁷(Dreier, 2006, p. xix).

⁸See, e.g., (Rawls, 1999); (Ross, 2009).

cannot legitimately be ignored or evaded.”⁹. For Joyce, this feature of moral judgements “doesn’t have its source in internal or external sanctions, nor in some institution’s inviolable rules, nor in the desires or goals of the person to whom it is addressed”¹⁰. He rests this claim on “a large body of empirical evidence [...] demonstrating that even very young children make” the distinction between moral or authority-independent rules and conventional or authority-dependent ones¹¹. The evidence in question is due to the psychologist Elliot Turiel¹² who found that:

Concerning a conventional transgression, such as a boy wearing a dress to school, when asked “But what if the teacher were to say it’s OK?” children will allow that the rule is no longer binding. But concerning a moral transgression, such as punching another student, children will tend to maintain that it is wrong regardless of what the teacher says on the matter¹³.

If moral judgements were indeed independent of the authority of institutions and convention, then a constructivist approach to providing a justification for moral judgements would be misguided. The reason is that the constructivist approach assumes that these judgements could have their origin in agreement and convention.

However, there are at least two ways in which the constructivist might respond to Joyce’s argument. First of all, even if there was conclusive empirical data in support of the moral/conventional distinction, it would still be another issue whether all or even the majority of moral judgements exhibit authority and convention independence. For instance, it might very well turn out that only some such judgments exhibit this feature, whereas the majority of them don’t. If that were the case, Joyce could of course deny that the latter qualify as moral judgments *proper*. And he could insist that moral judgments, properly understood, *must* exhibit the moral/conventional distinction feature. However, he would then have to motivate his restrictive notion of a moral judgment. For, in moral philosophy, judgments explained by constructivist approaches are commonly considered to be moral judgments also. If Joyce wants to hold that this is mistaken, he needs to motivate his view without appealing to the moral/conventional distinction, for otherwise he would be begging the question against the constructivist. If, however, judgments justified in the manner envisaged by constructivists qualify as moral judgments just as well as judgments exhibiting the moral/conventional distinction do, then Joyce’s claim that evolutionary theory undermines moral justification would have to be qualified significantly so that it only applies to those judgments that allegedly derive their justification solely from mind-independent objective moral facts. That is, the general conclusion of Joyce’s argument as it stands, would no longer follow. It would have to be weakened so that it only refers to a subclass of moral judgments.

However, constructivists don’t need to make even this concession to Joyce. For in a second, and more direct response to his point, they might challenge his view that moral judgements are independent of the authority of institutions and convention. That is, they could challenge

⁹(Joyce, 2006, pp. 58-60).

¹⁰(Joyce, 2006, p. 63).

¹¹(Joyce, 2006, p. 63).

¹²(Turiel, 1983, 1998).

¹³(Joyce, 2006, p. 136). Joyce mentions another interesting experiment to illustrate the point. For instance, “among Mennonite and Amish children and adolescents God’s authority does not determine moral wrongness. When asked whether it would be OK to work on a Sunday if God said so, 100 percent said ‘Yes’; when asked whether it would be OK to steal if God said so, over 80 percent said ‘No’. Such findings contribute to a compelling body of evidence that moral prescriptions and values are experienced as ‘objective’ in the sense that they don’t seem to depend on us, or on any authoritative figure.” (Joyce, 2006, pp. 129-139).

the moral/conventional distinction upon which Joyce's argument rests. For instance, Kelly et al. (2007) have shown that while participants tend to judge it wrong for a captain today to whip an unruly sailor, when told that this was a common practice three centuries ago, they judged that it was acceptable in that context. Also, Kelly et al. point out that much of the evidence for the claim that there is a moral/conventional distinction is gained from studies involving only harmful transgressions that school children might commit in the schoolyard, or from experiments where participants are incarcerated adult psychopaths (Blair, 1995; Blair and Cipolotti, 2000). Interestingly, in a different study that involved a greater variety of harm transgressions and that was conducted on the Internet, Kelly et al. found that these transgressions did not cause the responses found in studies using only schoolyard examples. Out of the nine scenarios that they designed to find out whether harms transgression are judged to be authority independent, in six cases, the "response patterns indicated that a substantial number of subjects did not judge harm transgressions to be authority independent"¹⁴. Note that (Kelly et al., 2007) is not the only study questioning the moral/conventional distinctions. (Nado, 2009) and (Kelly and Stich, 2007) also provide evidence to the same effect.

If, however, the psychological evidence that Joyce cites in support of the claim that moral judgements are authority independent is contentious, then his response to a constructivist approach to grounding moral judgements loses its force. As mentioned, according to Joyce's view, constructivists cannot account for a crucial feature of moral judgements, namely authority independence. However, if the empirical data taken to show that moral judgements have this feature is unconvincing, then Joyce's objection to the constructivist approach is undermined. Thus, since the antecedent seems satisfied, the constructivist approach to grounding moral judgments still stands as an alternative to Joyce's view¹⁵ that moral judgments have to track objective moral facts to be justified. Consequently, one can resist the conclusion of his 'evolutionary debunking' argument.

2.1 On a qualified debunking argument

Joyce could avoid the criticism just presented by clarifying that his argument does not represent a *general* evolutionary debunking of morality but only targets moral realism. The above argument could then be re-written thus:

- (1) If moral realism is true then moral judgements track moral facts.
- (2) Moral judgements have an evolutionary history.
- (3) This evolutionary history suggests that moral judgements did not evolve to track moral facts.
- (4) Thus, moral realism is likely to be false.

However, in response to this argument, moral realists may hold that an evolutionary account of morality does not undermine moral realism, because moral judgements *did*, contra Joyce, evolve to track moral truths. The moral realist could maintain that tracking moral truths is an evolutionarily advantageous, and thus selected, ability in us.

¹⁴(Kelly et al., 2007, p. 129). For space reasons, I cannot go into details of the study here, but see (Kelly et al., 2007).

¹⁵For a persuasive argument in support of a constructivist approach to grounding moral judgement see (Ross, 2009).

But Joyce might reply that there is no foundation for such a selection since there is no reproductive advantage in tracking moral truth. For instance, he could grant that being disposed to believe that one has a duty to not kill people for pleasure carries a reproductive advantage. But he could then hold that having this belief only if and because it is true does not contribute any additional evolutionary advantage. Given this, he might conclude that, “Ockham’s Razor will leave us with no reason to believe in moral facts”¹⁶. Thus, holding that tracking moral truths is reproductively beneficial does not seem to be a convincing response to Joyce.

However, the ‘tracking account’ mentioned is not the only possible explanation of how moral judgement could latch onto moral facts. Moral realists could alternatively argue that there is a close relation between evolutionary pressures and moral judgements and that this relation is truth-conducive in that it tends to predispose our moral judgements for moral truths.

The argument¹⁷ for this point rests on the following straightforward assumption: pleasure is typically, i.e. most of the time, good; and pain is typically bad. If that is so, then there is a relation between evolutionary pressures, moral judgements and moral truth.

To illustrate the point, I will concentrate on pleasure only. The same argument can, however, also be made for pain. The argument involves the following I take it uncontroversial evolution-theoretic claims. Evolution has built us so that we appreciate reproductively advantageous things by creating us such that we experience pleasure in these things. Furthermore, we evolved to be ‘moved’ by pleasure in that we tend to be motivated to pursue behaviours and experiences that are pleasurable because they are pleasurable. Also, agents that found certain evolutionarily advantageous things pleasurable would have been disposed to pursue them more persistently than individuals that did not. As a result, the former would tend to have more offspring and their disposition to take pleasure in evolutionarily advantageous activities, experiences and states of affairs would have spread in the population over time.

It is not difficult to see how our inclination to judge reproductively positive actions, experiences and states of affairs as morally good evolved from the more primitive dispositions to take pleasure in and be motivated by them. Moral judgements represent just another means by which evolution has predisposed us to pursue what is evolutionarily advantageous. It caused us to conceive of pleasure, which is evolutionary beneficial, as morally good and of pain, which is evolutionary detrimental, as morally bad.

However, if pleasure is typically good for an individual and if evolution has shaped moral judgements in the described way, then it has been favourable to truth tracking. The reason is that if pleasure is in the majority of cases good then the behaviours and states of affairs that evolution has made us value by judging them good, do indeed tend to be good. These behaviours or experiences tend to be good because they are pleasurable. Thus, if the above assumption that pleasure is most often good (fitness-enhancing) and pain is most often bad (fitness-reducing) is true then there is a close connection between evolutionary forces and the truth of moral judgements after all.

The just introduced proposal is different from the ‘tracking account’ response to Joyce’s anti-realism argument. According to the account just presented, moral judgements do not pick out already existing moral truths. Rather, evolution has produced moral evaluation and

¹⁶(Joyce, 2006, p. 208).

¹⁷I here employ the reasoning that Skarsaune (2011) proposes against Street (2006). As it turns out, it equally applies to (Joyce, 2006).

the corresponding dispositional attitudes at the same time. That is why Skarsaune (2011) has usefully called this account a

‘pre-established harmony account’; if pleasure is (usually) good, then it was ordained ahead of time, as it were, that (almost) whatever evolution should happen to make us value through this mechanism [of tracking pleasure and pain], it would thereby also imbue with value.¹⁸

So moral realists can respond to Joyce’s argument that an evolutionary account of morality does not necessarily undermine their view. They can hold that moral judgment evolved, at least with respect to goodness and badness, to track moral truths. And moral judgements refer to moral facts via referring to biological facts, such as pleasure or pain experiences.

However, Joyce might object that moral judgements can only serve their widely accepted evolutionary purpose of making us more social creatures, because they purport to be about moral facts and not just about facts that concern biological fitness¹⁹.

However, this response to the proposal at issue would beg the question against the moral realist, for it trades on the assumption that biological and moral facts do not align. The moral realist could deny this assumption and hold that both facts are related with each other in the above mentioned fashion of a ‘pre-established harmony’.

Joyce may also object that, according to the present account, moral judgements do not track moral facts, *as moral realists construe them*. He could contend that for moral realists, moral facts are mind-independent²⁰. If, following the above explanation, behaviours and experiences are good because they are pleasurable (or bad because they are painful), then judging something morally good (or bad) does no longer involve referring to mind-independent moral facts. For moral facts now depend upon evaluative attitudes such as likes and dislikes.

However, it is not clear that moral realists are committed to the view that mind-independence of moral facts implies the independence of these facts from evaluative attitudes. Many realists, such as Derek Parfit, Russ Shafer-Landau and Thomas Nagel do not hold that moral facts are independent of evaluative attitudes. In fact, for instance, for Nagel (1986), the unpleasantness of the sensory experience of pain represents a typical example of an ‘objective’ evaluative fact²¹. It seems that the more common understanding of ‘mind-independent’ among moral realists is that moral facts are independent of *belief*²². For instance, Shafer-Landau (2003) writes that, “realism is sometimes described as the view that moral truths are evidence-transcendent. [...] If evidence is restricted to beliefs, then this tallies with my [moral realist] conception”²³. At other places, he explains: “realism [...] insists that the truth of any first-order normative standard is not a function of what anyone happens *to think of it*”, and “realists are committed to the idea that a moral standard might be correct even if no actual person *believed it to be*; indeed even if everyone renounced it”²⁴.

So, in response to Joyce, moral realists could deny that they hold that moral facts are mind-independent in the sense he assumes. They could adopt the realist position that Shafer-Landau (2003) circumscribes: realism about moral facts consists in the claim that these evaluative facts are independent of our judgement. Realism “about the badness of pain, then, is

¹⁸(Skarsaune, 2011, p. 6-7).

¹⁹(Joyce, 2006, p. 131).

²⁰(Joyce, 2006, pp. 65, 194).

²¹(Nagel, 1986, pp. 156, 161).

²²(Skarsaune, 2011, p. 12).

²³(Shafer-Landau, 2003, p. 16).

²⁴(Shafer-Landau, 2003, pp. 15, 17), emphasis added, UP.

the view that anyone who makes the judgment ‘this pain isn’t bad’, whilst actually being in pain, is in error”²⁵. There could be “exceptional cases in which pain isn’t bad. In such cases, if there are any, anyone who makes the judgment ‘this pain is bad’ is in error”²⁶.

The sketched argument that an evolutionary account of moral judgments does not undermine moral realism thus still stands. As explained, a realist could provide a plausible evolutionary account of moral judgements that is compatible with the view that these judgements track moral facts and truths. Thus, Joyce’s argument, even when it is qualified so that it only targets moral realism, remains unconvincing.

2.2 On moral facts

But he could further narrow down the target of his evolutionary debunking argument by specifying that it only applies to those moral realists that accept the view that moral facts are independent of any evaluative attitude.

However, it is unclear whether there are moral realists willing to commit themselves to this understanding of ‘mind-independent’. As explained, at least some of the moral philosophers who are commonly considered as moral realists, such as Nagel or Shafer-Landau, would not do so²⁷.

Peter Railton, another moral realist, may remain equally unimpressed by Joyce’s evolutionary argument. The reason relates to the more fundamental question of what moral realists consider as moral facts. Commonly, a fact is something like a state of affairs involving concrete objects. For instance, the presence of the computer in front of me right now would be a fact in this sense. Evidently, the common understanding of ‘fact’ does not appear to work with respect to moral judgements or concepts, for they are not physical.

However, that does not pose a problem for the moral realist, for this notion of a fact also does not seem to work in many other cases where we nevertheless readily talk about facts. For instance, one may think of “facts of arithmetic, facts about what is probable or possible, or facts about the meanings of words”²⁸. Even though in these cases we do not deal with states of affairs involving physical objects, we nonetheless still talk about facts.

So what are moral facts? As it turns out, realists are not committed to a demanding ontology of moral facts. For instance, Sayre-McCord (2009) writes, moral realism does not “carry a distinctive metaphysical commitment over and above the commitment that comes with thinking moral claims can be true or false and some are true”. If moral claims are capable of bearing truth values then there are moral facts, whatever they may be exactly. This is the rather deflationary view about moral facts to which Railton (2006) appears to subscribe.

But are moral claims truth evaluable? In recent debates on moral theory, many moral philosophers have come to accept a minimalist account of truth according to which moral

²⁵(Skarsaune, 2011, pp. 14-15).

²⁶(Skarsaune, 2011, pp. 14-15).

²⁷Joyce might object that in accepting that moral judgements depend upon evaluative attitudes such as likes and dislike, Parfit, Nagel and Shafer-Landau mischaracterise moral judgement. For, as the empirical evidence by Turiel (1983) and others shows, these judgements have an objective, prescriptive force; they are not dependent on the authority of any individual or institution, Joyce might insist. However, I have already indicated doubts about Joyce’s interpretation of Turiel’s data (see section 2). Furthermore, as noted above, even if there was conclusive evidence for the moral/conventional distinction, Joyce would still have to motivate in a non-question begging way the view that those judgments that don’t exhibit the moral/conventional feature are not moral judgments proper. It’s not obvious how this can be done.

²⁸(Railton, 2006, p. 202).

claims do have truth values²⁹. The minimalist account in question denies that truth is a substantive relationship between language and reality. Rather, minimalists hold that “once an area of discourse exhibits certain logical and linguistic behaviour in ordinary discourse [. . .], it is appropriate to attribute truth and falsity to the sentence of this discourse”³⁰.

And moral statements do indeed behave much like ordinary statements. Railton (2006) gives the following illustration of the point. Consider the following argument:

- (1) True decency requires abstaining from eating meat.
- (2) Jack is truly decent.
- (3) Therefore, Jack does not eat meat.

The inference is logically valid. However, the argument draws a factual conclusion, which has clear truth-values, “by means of a logical inference from premises, each of which is a moral statement. If these premises couldn’t qualify as fully truth-apt sentences, how could they suffice to entail a fully truth apt conclusion by a valid process of reasoning?”³¹. According to the minimalist account of truth, since moral and non-moral language “work together grammatically, logically and rationally without a hitch”³², moral statements have, just as ordinary statements, truth-values. And since moral statements have truth-values, there are moral facts.

Now, if moral realism does not “carry a distinctive metaphysical commitment over and above the commitment that comes with thinking moral claims can be true or false and some are true” (Sayre-McCord, 2009), then Joyce’s genealogical argument does not undermine moral realism. The reason is that moral realism, construed in the deflationary sense just described, can remain indifferent to how moral judgements are justified, or how they evolved. All that matters for this view is that there *are* moral judgements and that at least some of them are true.

I shall not discuss whether this weak version of moral realism proposed by Railton and others is still a philosophically interesting meta-ethical thesis³³. I only introduce this version of moral realism to illustrate that Joyce’s ‘evolutionary debunking’ argument does not affect moral realism in all its forms.

In fact, as noted above, the only version of moral realism that might fall prey to his evolutionary argument is not very common amongst contemporary moral philosophers. As I attempted to show, it is at least not the moral realism that well-known realists such as Parfit, Nagel, Shafer-Landau and Railton propose.

3 Summary

I started with an exposition of Joyce’s evolutionary argument against morality. In his argument, Joyce claims that a genealogical account of morality would render moral judgements

²⁹See, e.g., (Dreier, 2006; Railton, 2006).

³⁰(Railton, 2006, p. 208).

³¹(Railton, 2006, p. 207).

³²(Railton, 2006, p. 207).

³³Since many anti-realists are willing to accept the minimalist account of truth too, in recent discussions, it has become unclear about what exactly moral factualists and anti-factualists disagree (Dreier, 2006, p. xx). It has been pointed out that if non-factualists accept the minimalist account of truth, then, as Railton (2006) writes, it is their “burden [. . .] to explain in what sense they are denying factualism” (Railton, 2006, p. 208). See (Sayre-McCord, 2009) on the issue of the remaining differences between realists and anti-realists once both parties accept a minimalist account of truth.

unjustified. In my response, I noted that there are two different interpretations of his argument. I first read his case as an ‘evolutionary debunking’ of moral justification in general, and pointed out that if it is construed thus, the argument rests on the assumption that reference to objective, mind-independent moral facts constitutes the only way of justifying moral judgements. This assumption turned out to be unacceptably restricted, since, for instance, constructivism offers an alternative route to the justification of moral judgments. As a result, on the first interpretation, Joyce’s argument was undermined. I then considered a second interpretation, according to which his case is specifically directed only at moral realism. In response to this reading, I argued that moral realists could still defend their position against Joyce by offering an alternative evolutionary account of moral judgments. Furthermore, I also showed that there are different versions of moral realism, depending on how moral realists construe the mind-independence and metaphysical status of facts. I maintained that many well-known moral realists do not propose a version of realism that is vulnerable to Joyce’s argument. Thus, whether Joyce’s “evolutionary debunking of morality”³⁴ is meant to undermine morality and moral justification more generally or only a particular meta-ethical view, in both cases his argument remains unpersuasive.

To conclude, while evolutionary theory might be a “universal acid” that “eats through just about every traditional concept and leaves in its wake a revolutionized world-view”³⁵, its ‘corrosive power’ still doesn’t suffice to undermine the concept of moral justification and our thinking about morality more generally.

³⁴(Joyce, 2006, p. 192).

³⁵(Dennet, 1995, p. 63).

References

- Blair, R. (1995). A cognitive developmental approach to morality: Investigating the psychopath. *Cognition* (57), 1–29. 12
- Blair, R. and L. Cipolotti (2000). Impaired social response reversal. *Brain* (123), 1122–1141. 12
- Dennet, D. (1995). *Darwin's Dangerous Idea*. Touchstone, New York. 9, 17
- Dreier, J. (2006). Introduction. In *Contemporary Debates in Moral Theory*,. Blackwell Publishing, USA. 10, 15, 16
- Joyce, R. (2006). *The Evolution of Morality*. MIT Press, Cambridge. 8, 9, 10, 11, 13, 14, 17
- Kelly, D. et al. (2007). Harm, affect and the moral/conventional distinction. *Mind and Language* 2(22), 117–131. 11, 12
- Kelly, D. and S. Stich (2007). Two theories about the cognitive architecture underlying morality. In *Innateness and the Structure of the Mind: Foundations and the Future*. OUP, New York. 12
- Nado, J. (2009). Moral judgment. In *Routledge Companion to the Philosophy of Psychology*. Routledge, New York. 12
- Nagel, T. (1986). *The View from Nowhere*. OUP, Oxford. 14
- Railton, P. (2006). Moral factualism. In *Contemporary Debates in Moral Theory*. Blackwell Publishing, USA. 15, 16
- Rawls, J. (1971/1999). *A Theory of Justice*. Harvard University Press, Cambridge. 10
- Ross, S. (2009). The end of moral realism? *Acta Analytica* 1(24), 43–61. 10, 12
- Sayre-McCord, G. (2009). Moral realism. In *Stanford Encyclopedia of Philosophy*: <http://plato.stanford.edu/entries/moral-realism/>. 15, 16
- Shafer-Landau, R. (2003). *Moral realism: A Defence*. OUP, Oxford. 14
- Skarsaune, K. (2011). Darwin and moral realism: survival of the fittest. *Philosophical Studies* 2(152), 229–243. 13, 14, 15
- Street, S. (2006). A darwinian dilemma for realist theories of value. *Philosophical Studies* 1(127), 109–166. 13
- Turiel, E. (1983). *The Development of Social Knowledge: Morality and Convention*. CUP, Cambridge. 11, 15
- Turiel, E. (1998). The development of morality. In *Handbook of Child Psychology*. Wiley, New York. 11