

If this is indoctrination, we are all indoctrinated

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Abstract

When thinking about moral education, a concern of liberals is that such education ought not to be indoctrinatory. There are various definitions of indoctrination, but a common theme is that indoctrination prevents us from critically assessing our own beliefs. Indoctrinatory education, then, teaches a doctrine in such a way that students will not countenance any alternative doctrines. A state which forced its citizens to endorse a doctrine in this way would not be a liberal state. However, if indoctrination consists in an inability to critically assess our own beliefs, I argue that we are all partly indoctrinated. Evidence drawn from neuroscience and psychology suggests that the basis of our beliefs lies in emotion rather than reason, and there is no independent space from which we can critically assess our own belief systems. This is not to justify an explicit form of state indoctrination, in which the state forces beliefs upon us. Instead, it is to assess problems with how we understand indoctrination within education. There is no entirely adequate solution to these problems, though education aimed at open-mindedness offers the most promise.

Keywords

Critical thinking, free will, indoctrination, liberalism, moral development, neuroscience, open-mindedness

Introduction

Accusations of brainwashing and indoctrination are common in contemporary political discourse. School pupils are ‘being brainwashed into working as “anti-vaxxer influencers” by parents’, claims a recent *Daily Mail* headline (Kelly and Dirnhuber, 2021). *The Telegraph* writes that a school has been accused of “indoctrination” after “partisan” lesson on Meghan, Duchess of Sussex and racism’ (Furness, 2021). A person writing to *The New York Times* claims that his father was brainwashed by YouTube (Appiah, 2021). In any of these cases, it is not entirely clear what the writers mean by ‘brainwashed’ or ‘indoctrinated’ (though Kwame Anthony Appiah does offer a more nuanced response to

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the problem in *The New York Times*). It seems to be assumed that while some exercise their capacity for rational thought, arriving at a reasoned conclusion, others are simply being convinced of a truth without reason.

These worries are prevalent in political theory, too. Recent works on the problem of indoctrination include David Copp's 'Moral Education Versus Indoctrination' (2016), Michael Hand's *A Theory of Moral Education* (2018) and Rebecca M. Taylor's 'Indoctrination and Social Context' (2017). I believe concerns about indoctrination are overwrought. This is not because an explicit form of state indoctrination would be welcome. Instead, it is that indoctrination is unavoidable. Drawing on evidence from neuroscience and psychology, and assessing arguments from within philosophy in response to the empirics, I argue that we are all at least partly indoctrinated. We may like to flatter ourselves by believing that we arrived at our conclusions from a place of independence, rationally considering the evidence as it is presented to us. However, such a place of independence seems unlikely to exist. All of us carry with us biases that influence our interpretation of the world around us. Our capacity to overcome such biases may be limited. Rather than worry about indoctrination, it is the nature of the biases that should concern us. While liberal political theorists often hope citizens are rationally committed to the beliefs they hold, I follow David Hume in arguing that rationality is not the basis of our belief systems.

In the section 'Defining indoctrination', I offer a definition of indoctrination. While there are various explanations of indoctrination, an aspect common to all definitions is that indoctrination leaves us unable to critically assess our own beliefs. In the section 'Why indoctrination is considered a problem', I explore the problems which liberal political theorists see indoctrination as causing. I present three problems that challenge how we might consider the individual capacity for critical reflection in the section 'Three problems for critical reflection': one drawn from neuroscience, one from psychology and one premised on a philosophical response to the first two problems. Finally, in the section 'Why we are all partly indoctrinated', I explain why, given the problems explored in the section 'Three problems for critical reflection', we all struggle to critically assess our own beliefs. It is in this sense that we are all partly indoctrinated.

Defining indoctrination

What is indoctrination? Michael Hand views a person as being indoctrinated if they accept a belief non-rationally (Hand, 2018: 6), that is, not on the basis of argument or the available evidence. Copp accepts a similar explanation. Indoctrination, for David Copp, following a dictionary definition, is 'inducing "a person or group to accept a set of beliefs uncritically"' (Copp, 2016: 152). The problem of indoctrination is that it undermines a person's ability to assess a belief critically. It might be thought that the focus of indoctrination is generally partisan or ideological beliefs, but as Copp points out, a person can be indoctrinated in any sort of belief. If a person has been taught to accept a belief to the point where she will no longer countenance any alternative, despite the strength of arguments or evidence that might undermine this belief, we can consider this person as being indoctrinated.

For Copp, education is indoctrinatory when people are taught to believe things when there are, or could be, strong epistemic reasons for not accepting this belief, but these reasons are excluded from education (Copp, 2016: 154). Of course, this depends on the success of the indoctrination if a person is to be considered indoctrinated. Despite this course of education, it could be the case that a person ends up rationally committed to the belief she was taught; she holds strong reasons for continuing to accept the belief, which she can defend through argument. She is not non-rationally committed to the belief either; if a stronger reason for an alternative belief system was presented, she would abandon her belief and accept the alternative. For a scheme of indoctrination to be successful, the indoctrinated person would have to be strongly committed to the belief she was taught non-rationally and be unwilling to alter this belief whatever the strength of the counterarguments.

As Rebecca M. Taylor notes, the literature on indoctrination often focuses on the process while ignoring the outcome (Taylor, 2017). For example, Ivan Snook's explanation of indoctrination focuses primarily on the content, method and aims of education (Snook, 1970). For Taylor, any account of indoctrination should include an explanation of the characteristics of an indoctrinated person. Callan and Arena highlight several problems with focusing only on the process. Often accounts of indoctrination assume that indoctrinatory teaching uses non-rational methods. However, as Callan and Arena argue, teaching multiplication through memorisation rather than reasoning is hardly indoctrinatory (Callan and Arena, 2009: 107). Cases which are classically understood as indoctrination, within religious or political groups, for example, often do use rational methods of teaching. Chains of reasoned argument are taught to participants. It is also wrong, Callan and Arena argue, to focus on the intent of the educator. Despite an educator's intent to indoctrinate, the student may not become indoctrinated, and the lack of an intent to indoctrinate does not mean there is not a risk of indoctrination (Callan and Arena, 2009: 108). There is also nothing within the content of doctrines that means the teaching of this doctrine will be indoctrinatory. For instance, many people have been indoctrinated into Marxism, but Marxist doctrines can be taught without indoctrination. It is also not the case that we can only be indoctrinated with false doctrines; it is possible to imagine a person indoctrinated with true beliefs (Callan and Arena, 2009: 109). Thus, for Callan and Arena, focusing only on the process of education – whether the method, the intent or the content – does not offer us a full account of indoctrination.

Rather than focus on the process of teaching in order to define indoctrination, Taylor and Callan and Arena argue we should instead look to the characteristics of the indoctrinated person. For Callan and Arena, the real problem of indoctrination is closed-mindedness. The indoctrinated person is unwilling to assess or revise their beliefs even in light of strong evidence to the contrary. This is not intellectual laziness; a person is not indoctrinated if she rejects evidence due to laziness. Instead, the problem is if 'the belief has become integral to the individual's understanding of who she is and why her life matters so that seriously considering evidence contrary to the belief is threatening to her very identity' (Callan and Arena, 2009: 111). Taylor's concern with indoctrination also relates to the effects it has on the individual's relation to herself (Taylor, 2017: 45). On Taylor's account of virtue epistemology, the closed-minded individual falls short of the virtues necessary for the pursuit of intellectual goods. To attain these virtues, a person must be

willing to pursue truth, give evidence its due regard when forming beliefs, be intellectually humble and be intellectually courageous (Taylor, 2017: 47). Attaining such virtues means a person is open-minded, while the closed-minded person fails in their attainment. An education system that encouraged closed-mindedness could, then, be considered indoctrinatory.

The account of indoctrination offered by Hand does not appear to be entirely adequate. Hand argues that indoctrination consists in being non-rationally committed to a belief, but, as Callan and Arena demonstrate, we can be indoctrinated while being rationally committed to the beliefs with which we were indoctrinated. However, Hand does uncover a concern that is common across the literature: indoctrination leaves us unable to critically assess our beliefs. This is Copp's main concern. It is also Callan and Arena's concern when they write that indoctrinated people consider evidence contrary to their beliefs a threat to their identity. For Taylor, the closed-minded person failing to attain intellectual virtues also lacks the ability to critically assess her own beliefs. It is this inability, then, that marks the indoctrinated person.

Why indoctrination is considered a problem

If indoctrination leaves us unable to critically assess our own beliefs, it may appear obvious why we might consider indoctrinatory education a problem. Copp states that 'no-one would condone indoctrination in the schools – it would be strange to do so' (Copp, 2016: 149). However, it is worth uncovering the sorts of further problems to which indoctrination might lead. In this section, I explain the sorts of problems indoctrination leads to by undermining our ability to critically assess our own beliefs.

Hand (2018) worries about indoctrination in his book *A Theory of Moral Education*. Reasonable people can disagree with one another in regard to matters of morality; if children are to be taught moral values, Hand argues that reasonable people could disagree over the contents of this education. Nevertheless, Hand finds certain basic moral standards which he thinks could be justified to all reasonable people. That we should not kill, steal, lie or cheat are injunctions all reasonable people could accept, according to Hand. The issue for Hand, then, is how moral contractarianism can be justified within education. If children are taught values so that they come to endorse these values non-rationally, Hand posits that education is open to accusations of being indoctrinatory (Hand, 2018: 6). To avoid this accusation, moral education should focus on basic moral standards that all reasonable people could accept through argument and evidence.

Copp sets out two methods for teaching moral doctrines which he argues are not forms of indoctrination. First, moral socialisation: children should not be taught to uncritically accept a moral doctrine as true, but to act virtuously through socialisation (Copp, 2016: 155–158). Through moral socialisation, children are taught how to feel and behave, rather than how to think. Second, through propositional moral education (Copp, 2016: 158–160). In propositional moral education, children are not taught how they should think about morality, but are presented with moral problems which they then think through. The idea here is that, through moral socialisation and propositional education, the moral beliefs children come to hold can be defended through argument, with children not holding their moral beliefs uncritically.

Finally, let us turn to the importance of open-mindedness to virtue epistemologists. Taylor, Callan and Arena are all concerned with education that leaves a person closed-minded. What, then, is the importance of open-mindedness? In his defence of open-mindedness as one of the most important epistemological virtues, Wayne Riggs argues that open-mindedness is a necessary pre-condition for tolerance; we must be open to considering the validity of ways of life different from our own (Riggs, 2010: 187). Being closed-minded would lessen our tolerance, which would have a negative effect on the cohesion of modern societies. This is, then, one of the dangers of indoctrinatory education leading to closed-mindedness. For Taylor, however, there is also a threat to the indoctrinated person. Closed-mindedness reduces our motivation to pursue intellectual goods (Taylor, 2017: 47–49). The open-minded person is motivated to pursue truth and understanding in relation to both her current beliefs and the development of her new beliefs. The closed-minded person lacks any such motivation due to her lack of interest in evidence and argument that contradicts her current beliefs. Indoctrination, through leading us to being closed-minded, threatens our commitment to pursue our own intellectual goods.

In sum, there are two problems with indoctrination in moral education I have identified. First, not all reasonable people agree on matters of morality. If children are to be taught moral values, those who disagree with those moral values could argue that children have been indoctrinated if alternatives are not presented. In a legitimate scheme of moral education, children must come to hold moral values which can be defended through argument, according to Hand. Second, for Copp, as for Hand, if the accusation of indoctrination is to be successfully avoided, a child must be given the skills necessary to critically reflecting on the doctrine she holds. This, then, is the most important problem with indoctrination. It is also why those such as Taylor, Callan and Arena worry about closed-mindedness. People need to be capable of assessing their moral beliefs critically in order to defend them or alter them if they are found wanting. This allows people to hold the necessary skills for the pursuit of intellectual goods. Indoctrination inhibits our ability to do this.

Three problems for critical reflection

I now consider three problems for critical reflection. The first is drawn from neuroscience. Following research in neuroscience on the free will problem, neuroscientists such as Patrick Haggard and Gerhard Roth question how we understand human agency due to a lack of a centre of conscious control within the brain. The second comes from the psychology of moral development. Following a Humean line of argument – that reason is the slave to the passions – Jonathan Haidt has argued that we form our sense of morality from our emotional responses, using our capacity for reason only to justify our initial emotional response. If our convictions are determined primarily by our emotional responses, this leaves little room for the power of reason to control our thoughts, allowing for independent reflection. Finally, there is a philosophical problem. Whereas determinism is more traditionally considered a problem for free will – if everything is predetermined, there is no room left for individual choice – Hume saw the opposite problem. Hume thought that determinism was a necessary condition for free will; if determinism was not true, our acts

would be only the result of chance. Determinism being true means that we have control over our acts, as there is a necessary connection between the will and the act. However, if the first two problems are considered true, there is no centre of conscious control – hence no central will from where to direct action – and it is emotion rather than reason that determines what we think and how we act (as Hume believed anyway). In the final analysis, it seems not to matter whether we live in a deterministic or an indeterministic universe. Whichever universe we live in, it is doubtful whether we have sufficient control over our thoughts to reflect on our beliefs from a place of independence.

The problem in neuroscience

Benjamin Libet attempted to show that our conscious awareness of our intention to act followed behind the neural activity which determined the act (Libet, 1985). What his experiments revealed was that the ‘readiness potential’ – the neural activity which prepares us to act – occurred roughly 350 milliseconds before subjects became aware of their intentions to act. For Libet, this seemed to suggest that there was little sense in which the will was free. Nevertheless, the freedom of the will was partially rescued by what Libet called ‘the veto function’ (Libet, 1985: 538). Once the readiness potential has been initiated, we can consciously veto this urge to act: we cannot consciously initiate our urge to act, but there is a partial role for conscious choice in choosing which urge to act upon.

Few contemporary neuroscientists subscribe to Libet’s views either on the workings of the brain or his conception of the will, but his work precipitated further research into the free will problem within neuroscience. In particular, neuroscientists reject Libet’s view of the veto function. According to Marcel Brass and Patrick Haggard (2007), the veto function itself is a deterministic process, not a process independent of other neural processes, but somehow controlled only by the conscious will. The space Libet left for indeterministic conscious choice is thus abandoned by those such as Brass and Haggard.

In his response to Libet’s work, the philosopher Daniel Dennett stated that Libet presupposed the existence of a ‘Cartesian theatre’ from where we controlled our actions, this being necessary for us to have free will (Dennett, 2004: 232–242). Dennett argues that the idea of a Cartesian theatre is nonsensical – it makes no sense to imagine part of the mind exists independently of other parts, yet retains the ability to control these parts. There is no independent space within the brain or mind from where we control how we act. Instead, consciousness is dispersed across the brain and body, and our decision-making processes occur across time and space.

Dennett’s philosophical formulation of the relationship between the will and the action maps on to how the relationship is understood within contemporary neuroscience. There are two contentions within neuroscience to which it is worth drawing attention. First, there are no ‘uncaused causes’ within the brain (Haggard, 2008: 936); decisions do not extend from such an uncaused cause towards an outcome through a linear process. Instead, the brain works largely in deterministic cycles. Second, there is no centre of conscious control within the brain. Gerhard Roth argues that whereas, traditionally, the cerebral cortex was thought to be the centre of conscious control within the brain from where our decisions were made, many regions of the brain are involved in decision-making processes (Roth, 2003). When we make decisions, many regions of the brain are

involved in this process, rather than it being primarily determined within one centre of conscious control. This is true in relation to our perception of time, which is distributed across the brain (Paton and Buonomano, 2018). When it comes to the timing of action and our perception, the basal ganglia play an important role, but the timing of action is determined not only within the basal ganglia but also across circuits involving various neural regions (Kotz et al., 2016). Pyasik et al. (2019) state that, while our sense of agency is thought to originate in the motor cortex, the neural activity causing this sensation is distributed across various brain structures. Haggard's more recent work also suggests that a variety of neural networks are involved in action selection (Haggard, 2017: 199–201). Our feeling of agency arises most strongly when alternatives are decided between in the frontal lobe. However, the sense of agency is learned; newborn babies have little voluntary control or sense of agency. The sense of agency, then, is not produced in response to an uncaused will determining an action, but arises through neural activity that develops through processes of learning.

Thus, while Dennett argued there is no Cartesian Theatre, meaning our thought processes must be determined across time and space within our brain and body, rather than within a specific place and moment, there is a similar understanding of this process within contemporary neuroscience. There is no uncaused cause from where conscious decisions can be made, nor is there a control centre from where commands can be issued. Instead, our thoughts and decision-making processes involve various parts of our neural networks.

Applying these neuroscientific research results to the problem of indoctrination raises two issues. First, there is no space from where we can critically assess our own beliefs independently. Each neural process is determined by previous neural processes, without any space of independence from where our thoughts can be assessed apart from this process of determination. Second, there is little way for new information to enter into this process except through external intervention – what occurs in the world outside of our selves and becomes internalised through our senses. It is only if there is external intervention that the internal processes will be broken. Even in the case of external intervention, new information will be assessed by a brain formed through prior processes of determination. Furthermore, while reasoned thought may lead us to conclusions at odds with our prior convictions even if it is deterministic, the sketch of moral development in the following section reveals a problem with our ability to revise deeply held convictions.

The evidence in neuroscience suggests the brain works deterministically, without a centre of control over neural processes. This may seem uncontroversial for philosophers who subscribe to the compatibilist position on free will – Dennett himself argues for this position. Dennett's arguments are convincing, particularly in relation to action. With Libet's conception of the will as his main target, Dennett shows how thinking occurs across time and space; 'we' do not have to 'be' in a particular place at a particular time in order to make a decision (Dennett, 2004: 232–242). First, in terms of place, 'we' cannot 'be' everywhere at once; if 'we' are waiting to make a decision within a particular part of the brain, 'we' will still have to wait to receive information from other parts of the brain. Second, in terms of time, each neural region does not work simultaneously all the time. Activity may be almost simultaneous when making fast decisions, such as returning a serve when playing tennis, but decision-making generally takes longer than this.

Dennett offers a convincing refutation of Libet's model of the will. What Dennett overlooks, however, is the implication of the two problems I identified earlier. First, each neural process is the outcome of previous neural processes; there is no independent space from which to assess these processes. Second, there is little way in which new information can enter into these processes except through events in the world outside of us. Take a person raised in a small town in which most inhabitants hold racist views. Throughout her childhood, she has regularly heard such views expressed and comes to hold racist convictions herself. Each of her thought processes in relation to race is influenced by prior thoughts characterised by racism. There are few occasions across her life when she encounters anti-racist views, but when she does hear such views, she judges them through a mind shaped by racist biases. Even if we accept Dennett's compatibilist account of freedom, it seems unclear how we can expect such a person to overcome her biases.

The evidence in neuroscience casts doubt on our ability to critically reflect on our own thoughts. On considering this evidence, it appears there is little possibility of us transcending our own deterministic thought processes, critically assessing our beliefs from a place of independence.

The problem in psychology

In response to the approach taken to moral development by Jean Piaget (1965) and Lawrence Kohlberg (Kohlberg and Hersh, 1977), Jonathan Haidt argues that it is not reason but emotion that determines our sense of morality (Haidt, 2007). Whereas Piaget and Kohlberg thought that we went through several stages of moral development, arriving in adulthood at the final stage where we have learned to act from abstract universal moral principles, Haidt argues our sense of morality remains attached to our emotional reactions to events during childhood. I argue that the empirical data better support Haidt's position, which gives us further reason to consider ourselves as possessing a limited capacity for thought control.

Whether the origins of morality lie in reason or emotion was a question that concerned both Hume and Kant: Hume's answer was emotion, Kant's reason. When involved in arguments over moral principles, Hume stated that

as reasoning is not the source, whence either disputant derives his tenets; it is in vain to expect, that any logic, which speaks not to the affections, will ever engage him to embrace sounder principles. (Hume, 1998 [1751])

For Hume, it was no use attempting to convince others through logical reasoning, as morality is rooted in emotion. It is their passions to which we must appeal. Against this, Kant argued that reason provided us with our moral motivations. For Kant, some motivations are empirical while others are a priori. Kant's idealism leads him to posit that moral laws can be understood from the noumenal domain. The noumenal domain is distinct from the phenomenal domain, the domain in which we experience the empirical world, which for Kant is only ever an appearance; the thing-in-itself belongs to the noumenal domain (Kant, 2007 [1787]: 251–264). From the perspective of the noumenal domain, which is not subject to the empirical restrictions existing in the phenomenal domain, we

can understand the moral laws in much the same way we can understand the answers to mathematical problems, as no empirical proof is required in either case. To understand matters of morality requires us to use our capacity for reason. We do not have to let the passions existing within the phenomenal domain determine our lives, as our capacity for reason is not restricted by the limitations within this domain. With this unbound capacity for reason, we can understand the moral laws, which can be universally understood. Morality, then, has its origins in reason rather than emotion, for Kant.

A sharp division between emotion and reason is not always accepted in philosophy. For instance, Peter Goldie argues that reason and rationality find their basis within our emotional judgements (Goldie, 2000: 2). This division is also the subject of particular criticism within feminist approaches to epistemology. Genevieve Lloyd traces the association of reason with men throughout the history of Western philosophy (Lloyd, 1984). From Plato and Aristotle through to Nietzsche, Lloyd demonstrates how reason is considered a male value which transcends the natural world, which is associated with femaleness. The maleness of reason is then in place to control the femaleness of nature. Alison M. Jaggar shows how this dichotomy comes at the expense of emotion, with reason posited as the controller of the irrational urges which emotions cause us (Jaggar, 1989). Emotions are, on this view, unstable and untrustworthy when it comes to the production of knowledge; it is reason we should rely on within epistemology. Rather than accept this relationship between reason and emotion, Jaggar proposes that emotions are important within knowledge production. Our evaluations of the world cannot be separated from the emotions to which they are tied. Such approaches to epistemology give us reason, then, to be sceptical about a strict dichotomy between reason and emotion, particularly if this dichotomy means privileging reason.

In their understanding of psychological moral development, Piaget and Kohlberg belong to the Kantian tradition. Developing the work of Piaget, Kohlberg posited that children go through six stages of moral development (Kohlberg and Hersh, 1977). The first two stages – the pre-conventional level – revolve around the avoidance of punishment and the satisfying of needs. In the third and fourth stages – the conventional level – actions are judged by the intentions behind them, and it is considered important that actions uphold the social order. Finally, once the person reaches adulthood, stages 5 and 6 – the postconventional level – should have been reached. At this level, the person judges actions by whether they would be deemed right by society as a whole, and has learned to act from abstract universal principles. In much the same way Kant saw morality as universal rules which could be understood through our capacity for reason, Kohlberg views the final stage of moral development as universal principles which guide behaviour.

One problem for this conception of moral development is that empirical research has shown very few people reach the final stage; only a select few act from abstract universal moral principles (Gibbs, 2013: 89–90). Bill Puka has stated that there is no ‘empirical basis’ for the final stage of moral development (Puka, 1990: 182), and those sympathetic to Kohlberg concede that this stage is a theoretical aim rather than an empirical fact (Gibbs et al., 2007; Habermas, 1990). This suggests, therefore, that most of us do not understand morality through an independent capacity for reason, coming to act from abstract principles. Instead, most people remain at the pre-conventional or conventional

level of moral development, understanding morality only as rules that we obey to satisfy our needs or that uphold the social order (Gibbs, 2013: 89–90).

Another problem with Kohlberg's theory identified by Carol Gilligan is its privileging of male values (Gilligan, 1977). What Kohlberg overlooks is the value of care. From surveys of women's attitude to moral problems, Gilligan finds women to be more concerned with caring for others, ensuring that moral problems are solved so that people are not harmed. It may look as though women's moral development is stunted; women were less likely to develop to reach the final stages of moral development. However, Gilligan argues it is not a problem with women's moral development, but a shortcoming of Kohlberg's scheme. The value of care is overlooked within this scheme. This is not to say Gilligan rejects Kohlberg's scheme altogether, but that she argues care needs to be incorporated within the model.

Others do reject such a scheme of moral development. Haidt's alternative explanation of moral development belongs more to the Humean tradition. Rather than acting from abstract moral principles, Haidt posits that we learn to understand what is moral from our emotional reactions (Haidt, 2007). Morality has a biological basis for Haidt, who posits that we are evolutionarily predisposed to certain emotional reactions, which allow for the formation of moral communities. Shared sets of values and expected behaviours are what allow for the stability of these communities. This seems to echo the importance of the community revealed through the empirical research aiming to test Kohlberg's theory, where morality was found to be largely a tool for upholding the social order. Whether or not upholding a social order is the primary function of morality, it is from the community that we derive our understanding of morality, according to Haidt (2007). The emotional reactions to which we are predisposed prepare us for life within our community. As Haidt states,

it is clear that we are prepared, neurologically, psychologically, and culturally, to link our consciousness, our emotions, and our motor movements with those of other people. (Haidt, 2007: 1001)

Haidt does not imagine that our acts and decisions are entirely determined by these emotions. As he states, there are times we can all remember where we reassessed our initial reaction to an event, arriving at a different conclusion (Haidt, 2007). However, these emotional reactions do prepare us to hold a certain sense of morality. Thus, the process in which we reassess our initial reaction will itself have been influenced by our emotional makeup. Haidt argues that moral reasoning follows behind emotional reactions, and the moral reason at which we arrive often only confirms our initial emotional reaction.

Even those on the Kantian side of the argument – those who claim that reason can motivate us – do not reject the force of emotion in providing us with motivation. For instance, while she shows how practical reason can hold motivational force, Christine Korsgaard does not attempt to argue that people are *always guided by reason or rationality* (Korsgaard, 1986: 24–25). Instead, Korsgaard argues that *if people are rational*, they will be motivated to act on moral commands. On this view, reason, following from our autonomous will, gives us an internal motivation; reason does not exist externally to us as

agents, placing commands on us from above (Korsgaard, 1986: 10). Through our capacity for reason, we can understand what morality demands of us, and this is enough to motivate us. This leaves us with the possibility that reason holds motivational force; as Korsgaard acknowledges, it does not mean that we will be guided by reason when forming our moral convictions. As the evidence suggests, few of us do reach such a stage where reason guides us independently of emotion or the communities to which we belong.

The Kantian idea of morality as rooted in rationality seems to be challenged by contemporary empirical research. Empirically speaking, it is not that people think through matters of morality and arrive at a conclusion in accord with abstract universal principles, but that the conclusion a person arrives at will be largely determined by their prior emotional reactions. As social beings, we are emotionally predisposed towards a sense of morality that will uphold the social order of the community to which we belong. Within this process of moral development, there appears to be little sense in which the individual is determining her own sense of morality from a place of independence.

While Hand and Copp worry about indoctrination preventing us from critically assessing our own beliefs, the sort of rationality required for this task appears unlikely to exist. Our emotional predispositions are important in determining the doctrines we endorse. If we are emotionally committed to a doctrine, these emotional commitments will influence any reassessment of our beliefs.

The problem in philosophy

It might be thought that the problem outlined in the section ‘The problem in neuroscience’ can be avoided through adopting a compatibilist position on free will. According to the compatibilist, determinism might be true, but determinism and free will are compatible. Hume accepted this position. However, while I do not aim to endorse a certain position on the free will debate, I argue this does not resolve the concerns described in this section. There are problems with both a deterministic and an indeterministic universe; neither offers us a space from which we can critically assess our own beliefs.

The free will problem is often viewed as arising from a conflict between determinism and freedom – if all action is determined by prior causes, there is no room left for the individual to freely choose. For this reason, many assume that in order to leave room for free choice, one must be an indeterminist. However, Hume saw the opposite problem: in an indeterministic universe, there could be no necessary connection between the will and the act (Hume, 2008 [1748]: 58–75). If all events are the result of chance occurrences, and effects are not necessarily the result of prior causes, the will could not be the cause of the act; in an indeterministic universe, nothing other than chance would really be the cause of anything. Regardless of the implications for free will, it seems an indeterministic universe would not grant us the capacity of rational control over our thoughts. Instead, our thoughts would also be subject to chance, and there would be no necessary causal connection between us and our thoughts.

However, given the two problems described above, I argue a deterministic universe is no more amenable to rational thought control. Hume’s argument for free will supposes two objects: the will and the act. If determinism were true, the will could cause the act. However, if the picture of neurobiology I sketched above is correct, there is no central

will. There is no centre of consciousness, and so there can be no central intention, motivation or desire, nor a place from where they are controlled. In essence, there is no will, only a network of neural circuits which translate to various intentions. While there may be causal connections between these intentions and the acts we perform, there is no 'will' as such guiding the intentions.

To illustrate this, picture the following scenario. A person hears a news item on her TV: a politician arguing in favour of introducing restrictions on immigration in the leadup to an election. This information is then processed within her brain through a series of deterministic processes. Within these processes, there is no control centre watching over events. These deterministic processes then lead her to perform an action: she goes to place her vote for the politician. Again, there is no command centre from which this act was controlled. Instead, there is a series of deterministic processes from the person hearing this information, to the person processing this information, to this person then acting.

Now it might be said that this person remains capable of consciously reflecting on her thoughts and acts. While the neural processes may indeed be deterministic, she is still reflecting and deliberating when deciding to act. However, as Roth (2010: 239) states, this deliberation process is itself determined by neural processes outside of our conscious awareness. It is not that our experience of consciousness is somehow forming the command centre; instead, this experience itself is determined outside of itself. Roth states that our feeling of freedom arises when our conscious intentions cohere with our unconscious plans (Roth, 2003: 129–130).

To add to this problem, I now turn to the psychological problem. Our moral character – which to a large degree determines what we think and our responses to events – is primarily determined in childhood. We are prepared to act and react by our emotional predispositions which developed during our childhoods. Let us imagine, then, that this person hears a news item about a politician proposing tougher restrictions on immigration which leads her to vote for this politician. During her childhood, she was encouraged to care for those close to her, but to treat those different from her with suspicion. This has left a deep impression on her. When she reflects on the news item, it is this impression which primarily determines her process of reflection. Not only is the process between her hearing this item and her acting a deterministic one without a centre of control, the way in which she reacts is determined by her moral character, which was shaped during her childhood. Even the way in which she consciously reflects on the information she is processing is determined by events earlier in her life over which she had little to no control.

As I have stated, my intention here is not to argue for a position on free will. All of the above could be accepted by someone who still endorsed the compatibilist position on free will; the compatibilist could accept that there is no control centre over our thought processes, and that our beliefs are determined by emotional predispositions, while still maintaining that if our intentions and actions align, we are acting of our free will. Instead, my aim is to challenge the way in which we view ourselves as directing our own thoughts from a place of independence. The evidence in neuroscience suggests we cannot transcend the deterministic neural processes which lead us to believe what we believe, while in moral psychology, it seems it is our emotional predispositions that provide the basis of

our beliefs. Events during childhood shape our character; our beliefs as adults are largely determined by the characters we developed as children; there is no command centre as such from where we can critically reflect on our beliefs.

If indoctrination is a lack of an ability to critically assess our beliefs, it seems – based on the neuroscientific, the psychological and the philosophical counterarguments outlined in this section – that we are all at least partly indoctrinated.

Why we are all partly indoctrinated

If these problems are taken seriously, I argue indoctrination in moral education is inescapable. The sense of morality we come to hold is largely outside of our control. If we are emotionally committed to the moral doctrine we hold, we are unlikely to reassess its merits whatever the strength of counterarguments. Furthermore, even if we do alter our moral beliefs, it is likely, as Hume posited, that we do so through emotion rather than reason. It is strength of feeling rather than the force of reason that shapes our sense of morality. When we come to reassess our beliefs, we cannot perform this reassessment from an independent place within our mind. Furthermore, we are likely to be emotionally committed to our beliefs. Thus, we still struggle to critically assess our beliefs. If this is the case, even the results of revisions to our beliefs to counter indoctrination will be partly indoctrinated.

If Haidt (2007) is correct, our moral beliefs grow out of our emotional development as children. We are predisposed to holding a certain sense of morality due to our emotional reactions as children. Thus, our moral dispositions begin developing prior to our acquisition of language. Morality, then, is not learned through processes of reasoning, but through our emotional dispositions. Of course, we eventually do acquire language, and can then justify our moral beliefs. As Haidt argues, however, moral reasoning is generally used to justify the initial emotional reaction. This does not suggest a substantive ability to critically assess our own sense of morality. Instead, it seems we are committed to certain moral values due to our emotional makeup, and we will likely remain committed to these values regardless of the strength of reasons to the contrary. Most of us are not moral philosophers well-equipped to defend our moral positions against opponents.

Copp holds that one way to avoid indoctrination in education is through moral socialisation. It is not clear to me, however, how this is avoiding the problem of indoctrination. Instead, it seems it may increase the sense in which education is indoctrinatory. If moral development begins prior to the learning of language and the ability to rationalise the moral values we hold, it seems moral socialisation will only further entrench these unrationalsed values within the individual. The process of socialisation will lead us to being more deeply committed to moral values on an emotional level, as we are taught moral behaviours without understanding the reasoning behind these behaviours. That we cannot rationalise the underlying moral reasons means we might become committed to moral values without understanding why. Once we acquire language and become capable of reflecting on the values we hold through the power of reason, we may only use this skill to justify the values we already hold due to our emotional commitment to them. This looks as though the problem of indoctrination has only been exacerbated.

A further issue is revealed if we turn to the problem in neuroscience. If the reading of neuroscience offered is correct, there is no centre of consciousness or control centre within the brain. There is, then, no centre from where a process of critical reflection could occur from a place of independence. If we are presented with a moral problem, the information will be processed within a complex network of neural circuits, with prior information feeding into this process. If Haidt is correct, some of this prior information will relate to our early emotional experiences as children. While we may consciously reflect on and deliberate the moral problem, the way in which we do so will also be determined by unconscious neural processes (Roth, 2010: 239).

What this suggests is that we have a limited ability to critically reflect on the moral doctrines to which we are committed. These doctrines are likely to be deeply embedded within us due to our emotional commitments, and there is no independent space from where we can assess these doctrines. If the environment in which we live, our society or culture has influenced our coming to accept these doctrines, there will be little we can do to overcome the way in which our beliefs have been determined. Thus, it appears there is little education can do to avoid being partly indoctrinatory; the space we have to be critical in a substantive sense is limited, so we may struggle to be critical of what we have been taught.

If education is all partly indoctrinatory, is open-mindedness possible? Consider what Riggs states:

For those who agree that the personal virtue of open-mindedness is necessary for the civic virtue of tolerance, the state has a legitimate interest in promoting the personal virtue in the institutions of public education. All the more reason to get clear on what it is we want to inculcate in future generations of excellent citizens. (Riggs, 2010: 187)

Riggs also recognises the difficulty of this:

A thinker who is sober, careful, conscientious, thorough, and the like, can still be subject to things like bias, overconfidence and wishful thinking. Indeed, we are likely to pick up some of these habits of thought from the intellectual community we grow up in. Because of the self-disguising nature of these habits, nothing short of the kinds of self-knowledge and self-monitoring that are constitutive of open-mindedness will serve to eliminate them. (Riggs, 2010: 184)

Open-mindedness is not easy. Riggs follows Adler in defining open-mindedness as a second-order attitude towards our own beliefs (Adler, 2004: 130; Riggs, 2010: 182–184). To be open-minded, we must be capable of assessing our own beliefs: we must have an understanding of the strengths and weaknesses of our own cognition and be able to monitor our own thought processes. When we encounter our own biases and overconfidence, we must be willing and able to reassess.

Given the problems discussed in neuroscience and psychology, can we do this? I think we can, but it is difficult, as Riggs recognises. It is only if we have been educated in the right way that we will develop these skills. Even when we think we are reassessing our beliefs, our prior biases may still influence our reassessment. As Riggs notes, habits of thought can

be self-disguising. If we are to be successful, education will need to have provided us with the necessary tools to uncover these habits. It is only in this sense that education could avoid the charge of indoctrination. However, even in the case of successful implementation of such education, it is likely that people will still hold both recognised and unrecognised biases. At the very least, the open-minded will be biased against the closed-minded!

To sum up, Copp's proposals for avoiding indoctrination in education do not succeed if my reading of the problems in neuroscience and psychology is correct. If our sense of morality is informed primarily by emotional experiences prior to the acquisition of language, Copp's method of moral socialisation will only further embed values within the individual beyond her capacity for reason. If we lack the ability to consciously control our thoughts, we will struggle to critically reflect on these values from a place of independence. Education aimed at fostering open-mindedness seems better equipped to escape the charge of indoctrination. However, even open-mindedness implies bias. It is in this sense that I argue we are all partly indoctrinated; we all hold values we struggle to critically assess.

Conclusion

If my readings of the problems in neuroscience and psychology are correct, we are all partly indoctrinated. There is little we can do to overcome our emotional commitments to our moral values, and there is no independent space from where we can critically assess these values. For those who hope to foster moral values through a scheme of education, it must be accepted that this scheme will be indoctrinatory. Children will have little ability to critically assess the values they are being taught, and these values will then inform their ability to think critically as adults. Education aimed at fostering open-mindedness appears to offer a more promising route out of indoctrination. Some of us may have second-order abilities to assess our own cognitive capacities. However, we will only possess such abilities if we have been taught how to develop them. Even if this is successful, a comprehensive ability to reassess our own biases from a place of independence is lacking.

This is not to argue in favour of a state which forces us to believe a certain doctrine. Indoctrination might be inevitable, but this does not mean indoctrination should be selected as political policy. However, if my assessment of the problems explored here is right, we ought to recognise our inability to fully escape our own biases. Any system of education is likely to be partly indoctrinatory. Even an education system that attempts to correct for biases will only succeed insofar as our prior thought processes have prepared us for this correction. If indoctrination is inevitable, we should be less concerned with indoctrination than we are with the biases with which people are indoctrinated. As I have argued, an education system aimed at open-mindedness offers the most promise. To overcome indoctrination, inasmuch as it is possible, we would do well to be biased towards open-mindedness, while recognising the impossibility of escaping our biases altogether.

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