Morality and its origin

The views of Patricia Churchland and Peter Singer analyzed.

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Double Your Degree With Philosophy

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Introduction

Since the day we are born we grow up learning from the people around us. We copy their behaviour; we learn their habits and learn about their set of values. At a certain age we receive the ability to form our own opinion and think about what we ourselves like to do and what we find important in life. I was raised the same way as my twin-brother. We went to the same primary school where we sat in the same class and we both learned from our parents the basic norms and values. They taught us what was right and wrong and how we should behave. After primary school my brother and I each went our own ways; we developed our own identities, responsibilities and moral values. Although we received more or less the same information for the first 12 years of our life, numerous differences in behaviour, moral values and beliefs have occurred between us. Beliefs, goals, way of life and conscience are all part of moral behaviour.

Moral philosophy explores the nature of morality and examines what is right and wrong. Moral philosophy has three areas: meta-ethics, normative ethics and descriptive ethics. Meta-ethics tries to answer abstract questions about what morality is and where it comes from.¹

Morality also offers a system of behaviour in standards of right and wrong. According to the definition of the *Stanford Encyclopedia of Philosophy* the term seems to be used in two distinct senses: 'a descriptive sense and a normative sense. More particularly, the term "morality" can be used either descriptively to refer to certain codes of conduct put forward by a society or a group (such as a religion), or accepted by an individual for her own behaviour, or normatively to refer to a code of conduct that, given specified conditions, would be put forward by all rational persons.¹²

Morality depicts the basic standards that govern our behaviour. It teaches 'what we ought to do', it has impacts on our everyday decisions, especially on the choices directed by our conscience. From where do we derive what we ought to do? Are moral values parts of our genetic basis, just like our genes determine how capable or how smart we are? Is morality just based on reasoning, derived from experience, or do we simply learn it from people around us when we grow up? But how would that explain the many differences between people, and especially the differences between my twin-brother and me, who were both raised almost exactly the same way?

Many philosophers have tried to answer the question where morality comes from. Theologically, cosmologically, biologically and sociologically speaking there are a variety of answers to this question. Early on many people believed that morality was decided by God. Philosophers today mainly debate that moral values are the products of rational reflection on objective truths about the universe or that moral values are a product of human nature. Many people also think that moral values are merely social conventions or local cultural norms.

The purpose of this paper is to show the different views on morality offered by two important moral philosophers. The first philosopher I will discuss is Patricia Churchland, whose book 'Braintrust' explains neuroscience in relation to morality. The second philosopher is Peter Singer, who has very different thoughts on morality in comparison with Churchland. The main focus of this part will be the review of 'Ethics and Intuitions', a paper written by Singer. In the following chapters I will describe the most important differences between the two views and explain my own thoughts about the views and arguments of both philosophers as well as explain where I think morality originates from.

¹ McCombs School of Business (2017), 'Ethics unwrapped'.

² Stanford University (2011). 'The Definition of Morality'. Stanford Encyclopedia of Philosophy. Stanford University.

Chapter 1. Patricia Churchland

In this chapter I would like to discuss professor Patricia Churchland's thoughts on morality. Patricia Churchland is an analytic philosopher and professor Philosophy at the university of California, San Diego. She is most famous for her philosophy of mind and her vision on the interface between philosophy and neuroscience. Churchland is called a 'neurophilosopher': a term Churchland herself has introduced in her first book in 1986. Neurophilosophy is according to Churchland 'the idea that the nature of mental processes such as decision-making, problem-solving and so forth are supported by neurobiological mechanism.' According to Churchland, philosophers must take account of neuroscience in their investigations and therefore the quote most representative for Churchland is: 'To understand the mind, we must understand the brain'.

Churchland takes a materialist position in the philosophy of mind (eliminativism) which means she does not believe in the common-sense understanding of the mind. Psychological concepts should be revised physically and can only be explained by modern neuroscience. Churchland is most interested in the question where values come from. In her book '*Braintrust*' she tries to explain a neural platform for moral behaviour (Churchland, 2011). Churchland establishes a connection between the understanding of what it is that makes humans social and caring for others and the understanding of what grounds morality. She argues that ethics and morality is social behaviour that is formed by several brain processes: caring, recognition of other' psychological states, problem-solving and learning social practices.

Values play a huge role according to Churchland. But where do values originate? Do they originate in the brain; but then how is it that brains value anything? Churchland explains that a ground-floor function of the nervous system is caring (Churchland, 2011:30). Our brain is organized to make sure we live towards a standard of welfare. Self-caring is selected over self-neglect in order for mammals to seek well-being and to survive. The circuitry for self-maintenance and the avoidance of pain is the source of the most basic value: being alive.

Rules for moral behaviour according to Churchland derive from a crucial step going from self-caring to caring for others. This step depends on neural and bodily mechanisms that influence the female mammalian brain when giving birth to an infant (Churchland, 2011:15). The neuropeptides oxytocin (OXT) and arginine vasopressin (AVP) play a big role in this process. OXT's primary purpose is solidifying the bond between mother and infant, but Churchland argues that OXT increases empathy towards members of one's inner circle. Churchland argues that these peptides make our brains social and as a result our generalized pain system works not only when our own well-being is threatened but also when another's well-being is threatened and then especially when something happens with people we are close with (Churchland, 2011:39). This is called attachment. This claim is supported by research, which shows that OXT is released during positive social interactions and OXT levels are higher when animals feel safe and comfortable (Churchland, 2011:49). But besides the effects of OXT and AVP on caring for others, what is the connection between attachment and morality?

Churchland not only bases her thoughts on peptides OXT and AVP but also uses research related to the regions of the brain. She argues that social behaviour is part of the same spectrum of actions as moral behaviour. The same regions of the prefrontal cortex show increased activity when subjects are confronted with social or moral events. Churchland effectuates from this the important conclusion: 'Attachment, underwritten by the painfulness of separation and the pleasure of company, and managed by intricate neural circuitry and neurochemicals, is the neural platform for morality' (Churchland, 2011:16).

In order to give more body to the argument on OXT being linked to cooperation, Churchland tries to explain this relation in chapter 4 of her book. She makes the hypothesis that cooperation and trust are sensitive to OXT levels (Churchland, 2011:71). According to experiments, subjects with higher levels of OXT were more alert of the feelings of others and more willingly to trust others. Trust permits cooperation and makes people more interested and sensible to others (Churchland, 2011:91). According to Churchland, a high level of cooperation is enabled by the social system supported by OXT, which again makes the connection between the brain and cooperation.

Humans are quite good in networking as Churchland calls it. We know how and when to benefit from people around us (Churchland, 2011:96). But have we learned to act in this way or are we already skilled to do so on a genetic basis? According to Churchland, there is no genetic basis or a special 'gene' for cooperation or any other specific behaviour. In nature, genes play a very big role, but it is still not clear how they play this

³ Churchland P. (2017) Patricia Churchland.

role exactly and the question is, whether there is anything meaningful to say about this relationship. Some philosophers say our genetic basis is depicted in the intuitions we have and that we are born with the capacities to know what is moral and what is not. Churchland does not believe in the existence of an innateness that could explain universal traits and capacities of humans (Churchland, 2011:102). According to her, this is just an easy solution to the problem. The existence of intuitions telling us what is right or wrong is in itself no general rule for believing that intuitions have an innate basis. Properties may have a genetic basis, but this does not mean that everyone has this genetic basis: it may not be universal. Intuitions reflect social practices, practices that can also be obtained by living in a certain environment or can be learned from others around you. She agrees with David Hume who argued that emotion and reason are connected, but instincts should not be examined by reason. 'Reason does not create values, but shapes itself around them and takes them in new directions' (Churchland, 2011:5).

On the basis of this argument, Churchland opposes the social psychologist Jonathan Haidt who made a list of intuitions, which according to him have a fundamental and innate basis (Churchland, 2011:112). In chapter 2 I will elaborate more on Haidt. But important in discussing Churchland is that she feels that the list Jonathan Haidt came up with is just random and not supported by any evidence. Churchland rather agrees with Aristotle, who said: 'the exercise of social skills depends on acquiring the appropriate habits and is influenced by daily encounters'. Aristotle felt that creating a system for individuals to live together harmoniously was one of the most important goals of life. According to Churchland, our brain is also structured so as to settle and form solutions in order to satisfy our needs as much as possible, to boost our relationships with others and to solve problems in the best possible way.

Elaborating on Aristotle, Churchland says that this system linked to satisfaction is formed by social skills and habits learned by experience. Because of past experiences, we are able to learn which behaviour is regarded as rewarding and is therefore contributing to the satisfaction process. Habits and daily behaviour depict what in a group is regarded as morally wrong or right, what is appreciated and what is not. Back to the values: do values then come from aiming to satisfy the people around you? Values do not depict a guideline for the all the aspects of social understanding, they depict what we find important, but they don't show specific rules. Also rules central to for example etiquette often conflict with other rules. A common example for such situation is the difference in greeting someone, which is seen in different cultures in the world. Rules in greeting, which for certain people are seen as favourite or normal, like shaking a hand when welcoming someone new, are not normal for others, who prefer for example bowing to each other. Which rule to follow and if or when it is possible to make an exception to a rule is not something that is explained by values or morality.

According to Churchland 'the golden rule' which says; do unto others as you would have them do unto you' used by many philosophers, is not applicable in every situation, since different parties have different moral values. Churchland also opposes the direction of utilitarianism proposed by Jeremy Bentham and the deontological theory proposed by Immanuel Kant with his idea of a categorical imperative. Morality, Churchland says, is not about 'rule-making'; you are not going to find a rule. 'Although attachment may be the platform for morality, there is no simple set of steps, no deductive operation, no exactly applicable rule, to take us from I care, I value, to the best solution to specific moral problems, especially those problems that arise within complex cultures' (Churchland, 2011:23).

So what becomes clear from what we have said, is that according to Churchland, morality is not based on rule following. Yet if there are no rules to follow, how do we know what we ought to do? On the basis of everything Churchland has said in *Braintrust*, the answer would be that the process of moral decision-making is guided by a constraint satisfaction. Constraint satisfaction, which appears when we value the well-being of ourselves and by others around us. Rules represent attempts at articulating deeper, brain-based values. The domain of social behaviour has become very complex. Rules come in to help discussing, negotiating and deciding in situations by taking into account our system of ethical values. Conscience in this picture is formed by intuitions of what is right and wrong, and at the same time is being influenced by attachment, our social system and our imagination. Churchland: 'Given normal neural networks, the pain from being shunned and the pleasure of belonging, along with imitation of those we admire, give rise to powerful intuitions about the absolute rightness or wrongness of classes of behaviour' (Churchland, 2011:192).

Chapter 2. Peter Singer

In this chapter I would like to explain Peter Singer's thoughts on intuitions and ethics. Peter Singer is professor of Bioethics in the University Centre for Human Values at Princeton University and Laureate Professor at the University of Melbourne. He is specialized in applied ethics and famous for his utilitarian thoughts and opinions. He argues in favour of giving help to the global poor and in his book *The Life You Can Save* he explains why he thinks we should be doing much more for people living in extreme poverty. Singer argues that one's own interests cannot count for more than the interest of others and therefore universalization leads directly to utilitarianism. Utilitarianism according to Singer is love for everyone, not only the people close by (Singer, 2010).

In his essay *Ethics and Intuitions* (Singer, 2005) Singer presents that while thinking about a moral issue we should be critical about the first intuitions that come to mind. Singer's main opinion is that the recent developments in the field of neuroscience provide more urgency to be critical towards common intuitions and should not be the basis for a normative moral theory. In the following paragraphs we will see why Singer holds this view.

The question Singer asks is: Does understanding evolution help to understand where ethics comes from? What Singer logically assumes is that today we have the advantage of having a modern scientific approach to the questions whether ethics comes from nature or culture or whether ethics is objectively true. Many great philosophers have discussed questions about the origin and nature of morality, without having had our current understanding of evolution and its application to ethics. Nevertheless Singer argues that the 'path of evolution' does not have an influential relationship to the 'path of moral progress'. According to Singer evolution helps to explain our feelings, attitudes and behaviour. It explains how our norms and standards have changed by natural selection and in this way changed characteristics between generations (Singer, 2005:342).

As we have seen in the previous chapter, Churchland argues that mammals developed the need to take care of others in order to get a higher chance of survival. Singer argues in *Ethics and Intuitions* that by looking back evolutionary we see that there was not really a struggle of survival for humanity in itself; it was much more a struggle between different human beings. Singer claims that because other humans are members of our species there is no advantage in concerning for others. We do see cooperation between individuals says Singer; this is because there is selection within groups so there is a need for individuals to choose partners. By choosing partners we are developing notions of justice and dishonesty. Cooperation is natural in such a way that it has become part of our biological nature, it has evolved. Detailed rules or justice, on the other hand, are not part of our nature. They have evolved because of language and culture within and between societies. Cultural variations in human morality are the result of natural selection.

At the end of his second chapter in *Ethics and intuitions* Singer writes: 'Different forms are the outgrowth of behaviour that exists in social animals and are the result of the usual evolutionary processes of natural selection. Morality is a natural phenomenon. No myths are required to explain its existence' (Singer, 2005:337). Here he explains his main point. Singer does not believe in an evolutionary ethics. We have a better understanding of morality thanks to evolutionary biology and sciences but this is not a reason to come up with a theory about 'what we ought to do' based on evolution.

Singer describes the same functions to morality as does philosopher James Rachels. James Rachels, an American philosopher specialized in moral philosophy, in 1986 wrote a book on ethics called *The elements of moral philosophy*. He tries to provide a conception of what morality is about. According to Rachels, ethics is a rational attempt to solve how we ought to live together. For every moral action we need good and rational arguments. 'Ethics is first and last an exercise in reason' (Rachels, 2003:11). You cannot compare physics and morality; 'Morality is, at the very least, the effort to guide one's conduct by reason, that is, to do what there are the best reasons for doing – while giving equal weight to the interests of each individual who will be affected by one's conduct.' (Rachels, 2003:14) Physics on the other hand, relies on truths, which are beyond discussion.

When Singer starts talking about moral decisions and behaviour, he refers to the psychologist Jonathan Haidt. Jonathan Haidt is a social psychologist and professor of Ethics and Business. In 1960, he developed the social intuitionist model in which he explains that moral judgment is primarily based on intuition.

⁴ Singer P. (2017). Peter Singer.

⁵ Rachels J. (2017) James Rachels

⁶ Haidt J. (2016) Jonathan Haidt

Reasoning plays a much smaller role in making moral decisions. The process of evaluating and making judgments is an automatic process, according to Haidt; and justification of the judgment follows after the intuitive response (Haidt, 2001:815). People engage in reasoning largely to find evidence to support their initial intuitions. Haidt says that there are two important deceptions in our moral life. The first one is that we believe that our moral judgments are caused by our moral reasoning. The second one is similar to the first, but is related to others: we believe that we can change someone else's mind by proving that another's reasoning in a moral issue is flawed. This belief is wrong, we are trying to persuade when there is nothing to persuade.

Singer thinks that in Haidt's work there is support for the notion that intuitions are emotional responses. A decision is already made on non-rational grounds and reason only tries to build the best possible case for this decision (Singer, 2005:347). Intuitive responses are immune to rational correction. Although according to Singer this might be true in a practical sense and often the case by moral decision-making, it is according to Singer no reason to accept this method. We should leave our evolutionarily based intuitions behind us, and we should find a rational answer to moral problems.

Other insight into the way we make moral judgments has come from a thought experiment re-analysed by Joshua Greene, which is called 'the trolley problem' (Greene, 2002). There are two versions of the trolley problem. In the first, a trolley is rolling down a track towards a group of 5 people. To prevent these five people from dying, you can throw a switch to divert the trolley so it will only kill one person. In the second version you can only prevent the trolley from killing five people by throwing a stranger on the track to stop the trolley. Most people would take action in the first version but would not throw a stranger in front of the trolley to stop it, which is being asked of them in the second version. Greene explained that these different intuitions we have are linked to different emotional responses summoned by the situations. The thought of pushing someone on the track with the result of killing this person is more emotionally striking than the thought of throwing a switch, although both actions will produce the same result. To support this, Greene used brain scans to look at neural activity. He found that in the more personal matter (pushing a man in front of the trolley) there were different brain parts active. When moral decisions need to be made in more personal situations, brain parts associated with emotional activity are more active than when moral decisions need to be made in impersonal situations. But why do our emotions play a role in personal situations and why not in impersonal situations?

Greene explains the why people are ok with throwing a switch and not with pushing a stranger on the track on an evolutionary basis (Greene, 2003:848). In his paper 'From neural is to moral ought' Greene explains that considering how we have evolved, it makes sense that we have developed the urge to help others who are in need, but mostly so in the case of people who are close by. 'We ignore the plight of the world's poorest people not because we implicitly appreciate the nuanced structure of moral obligation, but because, the way our brains are wired up, needy people who are 'up close and personal' push our emotional buttons, whereas those who are out of sight languish out of mind.' Throwing a switch is seen as impersonal and throwing a person on the track as a personal situation, this is why it is more likely that our first intuitive response is to act in the first situation and to do nothing in the second situation.

As seen above, Greene depicts an evolutionary picture of why we have certain intuitions and what the role of personal involvement is in the intuitively decision we make. Singer also connects this theory to the theory of evolution. He argues that the way in which we stop the trolley and kill one person instead of five is important. The possibility of killing someone by throwing a switch has only been possible in the last two centuries, and according to Singer this is too short to affect our evolutionary development. If it was too short to affect our evolutionary development, there also has not been any impact on our intuitive responses. From this Singer argues that our intuitions are a result of our evolutionary past and cannot be trusted. 'The direction of evolution neither follows, nor has any necessary connection with the path of moral progress. 'More evolved', does not mean 'better" (Singer, 2005:342).

The fact that our moral intuitions are part of our human nature is no reason for Singer to assume that we can rely on them. But is there something else that tells us what 'we ought to do'? According to Singer, the debate about where moral values come from is between theories of ethics based on utilitarianism and consequentialism and theories of ethics based on common moral judgments or intuitions (Singer, 2005:344). In his essay *Ethics and Intuitions*, Singer argues against the method of reflective equilibrium, which tries to link the role of a normative moral theory to scientific theory. Reflective equilibrium is a theory by John Rawls, which uses the revision of judgments, principles, considerations and theories to get to an acceptable coherence among these.⁷ Rawls tries to match judgments with a reasonable theory to explain them. When

Stanford University (2011). 'Reflective Equilibrium'. Stanford Encyclopedia of Philosophy. Stanford University.

the credibility of the theory and judgments reach equilibrium we end up with the best possible theory. According to Rawls 'reflective equilibrium can be interpreted as an ideal state, where all moral judgments cohere to such a degree that they are justified, and as a process for the revision of moral judgments, which ultimately aims at such a coherence and thus is a method for defending and criticizing moral judgments'.

Peter Singer opposes the theory of reflective equilibrium because, according to him, it assumes that our moral intuitions are some kind of data from which we can learn what it is best to do. According to Singer, there is no clear link between a moral theory and a scientific theory. Our moral intuitions are not data from which we can learn what we ought to do. We can only construct moral views from concepts and ideas that we already have.

In 'Sidgwick and Reflective Equilibrium' Singer already wrote a critique on the reflective equilibrium and in this piece of work he asks an interesting question. When we reach a reflective equilibrium, so when a moral theory matches a set of considered moral judgments, does this mean that we have a theory which is simply the one which is the most likely to be correct, or does reaching an equilibrium mean with our judgments we make the theory correct by definition? (Singer, 1974:493). According to Singer, the method of reflective equilibrium accepts the intuitions and moral judgments too easily, while in practice we should be very critical about our intuitions and judgments. The point of the method is to determine which judgments are justified and not why we in fact embrace the normative judgments we have. Rawls left no room for any idea of validity that is independent of achieving reflective equilibrium. Norman Daniels, professor of population ethics,8 on the other hand, explains the reflective equilibrium in the following way: "The method of reflective equilibrium consists in working back and forth among our considered judgments (some say our "intuitions") about particular instances or cases, the principles or rules that we believe govern them, and the theoretical considerations that we believe bear on accepting these considered judgments, principles, or rules revising any of these elements whenever necessary in order to achieve an acceptable coherence among them."5 Using the method in this way there is space for critical inquiry of the moral judgments and Singer would agree to use the method of reflective equilibrium according to this definition.

All ethical theories imply the use of intuitions. Rejecting all intuitions creates space for scepticism and nihilism. According to Singer, the research by Greene and Haidt shows an interesting concept of intuitions. It offers the possibility to distinguish between two different kinds of responses we have (Singer, 2005:349). The first one concerns immediate responses based on emotions and the second one delayed responses based on reason. So there is a possibility to separate between two kinds of responses: rational responses and those that are not rational. Haidt's research shows that reasoning is just a justification for our intuitive responses. Greene's research shows that in some cases the response is rational. On the basis of such rational responses, Singer suggests that the deliberation subjects make, is that the death of one is a better option than the death of five. This results in throwing the switch in the trolley case, but also in pushing the stranger in the footbridge case. Looking closer at the statement 'the death of one person is a lesser tragedy than the death of five', however, we could say that this is also an intuition. And as we have seen, Singer clearly explained in his work that according to him intuitions were not relevant and depicted them as 'evolutionary artifacts'. Singer explains his thoughts in the following way: 'It might be said that the response that I have called 'more reasoned' is still based on an intuition, for example the intuition that five deaths are worse than one, or more fundamentally, the intuition that it is a bad thing if a person is killed. But if this is an intuition, it is different from the intuitions to which Haidt and Greene refer. It does not seem to be one that is the outcome of our evolutionary past' (Singer, 2005:350).

Taking this in consideration, Singer comes to the conclusion that we should make a choice between two directions in understanding ethics. A direction that leads to moral scepticism, the belief that moral intuitions and judgments are based on emotions and in which reason is a justification for a decision already made on non-rational grounds or the second direction, which implies the use of the distinction between the different intuitions explained above. We distinguish between the intuitions linked to emotions which give us evolutionary benefits and which are culturally contingent and the intuitions based on reasoning. Singer believes in the second direction. Ethical judgments are not immune from criticism; there is a role for reasoning or argument in ethics. 'The issue of the role that reason can play in ethics is the crucial point raised by the claim that ethics is subjective. The non-existence of a mysterious realm of objective ethical facts does not imply the non-existence of ethical reasoning' (Singer, 1993:7). Singer clearly believes that our evolutionary path does not have an influence on our moral path. In between there is space for reason and rationalization. We should find which intuitions are based on reasoning. And to avoid scepticism, we should believe that these intuitions lead us to the right acknowledgment of what is good.

⁸ Harvard University. (2017) Norman Daniels

Stanford University. (2011) Stanford Library 'Reflective Equilibrium'

Chapter 3. Churchland vs. Singer

We are now in a position to discuss the most important differences between Patricia Churchland and Peter Singer. In the previous chapters we have seen their thoughts on neuroscience and morality, intuitions and the origin of our moral values.

The most important difference between Churchland and Singer concerns the theories on 'what we ought to do'. If you ask Singer what we ought to do he replies with the following answer: 'Ignore all our ordinary moral judgments, and do what will produce the best consequences' (Singer, 2005:346).

What Churchland makes clear in *Braintrust* is that the reason we have moral values and know 'what we ought to do' is because we care for our 'kin and kith', for people close by us. Singer's worldview on the other hand, is that we should do good not only to the people around us but must look further. We should apply the same standards to strangers and foreigners as we do to the people close by. Since we obviously have the impulses and urge to help people in need, why not also apply these further away from home?

The first important difference we have already seen in the chapters above is the role of evolution in concerning for others, which is an important notion for the claims Patricia Churchland makes. According to Churchland, individuals had a higher change on survival if they developed an urge and need to concern for others. Singer on the other hand argues that by looking back on evolution there was no need to concern for others because there was not really a struggle for survival for humanity itself. So how did we form our moral opinions, behaviour and find our values?

If we ask Churchland the question: where do values come from, she would reply by saying that for the answer we should look into the brain and study the evolution of the brain. Neuroscience shows us how we came to care for ourselves, for others and where our moral values originate. Churchland argues that we are social by nature; it is part of who we are. From this capacity of being social we form moral practices and rules. So it is science that can tell us how we distinguish right from wrong. Recent developments in neuroscience help us to understand what it is about our nature that makes us social and it is thus from science that we begin to understand what it means to be social. Sociability is the basic matter of the mammalian brain. Human values come from our need to care for others. Humans begin to learn social aspects of life as soon as we are born: by trial and error we learn when something is good and when something is not.

Singer on the other hand argues that it is a mistake to believe that any scientific knowledge will provide us with moral premises. Science does provide us with information by figuring out what is right or wrong, but it cannot give us our basic values. Science can tell us things about the origins of morality. We have evolutionary science, which tells us how we have evolved, how we got here, but this does not tell us anything about what we should do. Singer also believes that although we know how morality evolved, we should not think this only happened in human beings. Morality is also observable in other mammals. In other animals we see behaviour that it very close to our own behaviour. Singer explains this with a basic example of justice between animals. If you do a favour for me, then I should do one for you, this is a practice which is seen in humans but also in many other animals.

Yet Singer also acknowledges that we are beings who have evolved the capacity to reason, think and reflect on ourselves, which goes beyond the capacities of any other species. We start to think about our behaviour and the behaviour of the people around us. We do not completely rely on our instincts anymore, we reason as well, and because of that, although it can tell us where morality comes from, science does not tell us what we ought to do. Maybe what seems like the right behaviour might by instinct not be the right thing to do in a particular circumstance. We have evolved 'caring' for people around us, but we have not yet developed 'caring' for the people who we do not see. This, according to Singer is why science cannot tell us how to distinguish right from wrong. There are reasons to do something about the suffering of others, but science does not give these reasons. We do not have a higher chance of surviving by helping people we do not see, but there are reasons to help these people. There are many other ethical questions which science cannot answer. Singer gives the following example: 'Should we extend life for 1000 years if in that case fewer people could survive? Science cannot tell us if it is better to have less people who live for 1000 years or many people who live shorter'. So he concludes that there are many things that science does not tell us. 11

¹⁰ The Science Network (2010: The great debate: 'Can Science tell us from right or wrong?'

¹¹ The Science Network (2010: The great debate: 'Can Science tell us from right or wrong?'

What is morality and where does it come from? Many people in the history of moral philosophy have tried to answer this question. One of the most classical theories has come from philosopher and historian David Hume. Hume believed that moral values are the product of certain natural human desires. According to him, both passion and reason are the main producers of human behaviour. (Hume, 1985:520-521) Passions help us to set out our goals and reason helps us to reach these goals. Passions determine what humans find desirable and valuable. Values are therefore projected by passion. Some passions are moral passions according to Hume: passions that promote the common good. These passions are inherited and constitute the basis of human morality. From this view David Hume introduced his famous theory called 'from ought to is'. The is-ought problem describes the process when writers make claims about what ought to be on the basis of statements about what is. Hume was the first to find a difference between both statements; he said that it is not obvious to move from descriptive statements (about what is) to prescriptive statements (about what ought to be). And since morals excite passions, reason alone cannot tell you what you morally ought to do. So there is a gap between reason and passion/emotions. And there is a gap between what 'is' and what 'ought'. The rules of morality are not conclusions of what is. In the absence of values, facts alone are insufficient to arrive at an ought.

Recent developments in especially neuroscience suggest that Hume was right to consider that humans have natural inheritance, which contributes to 'the common good'. This is what Churchland confirms as we have seen. What Churchland points out in *Braintrust* is that the way we work out our social ought is strongly linked to our is's. Simply stated: morality has to do with our biological nature. Our caring system and learning capacities restrain our problem solving. They produce values to come up with better solutions. In *Braintrust* Churchland says: 'What gets us around the world is mainly not logical deduction (derivation). By large, our solving-problem – the figuring out and the reasoning – look like a constraint satisfaction process. Most practical and social problems are constraint satisfaction problems, and our brains often make good decisions in figuring out some solution. Constraint satisfaction is the process in which various factors with various weights and probabilities interact so as to produce a suitable solution to a question. This is not necessarily the best solution, but it is a suitable solution'. Churchland is filling the gap between what 'is' and what 'ought' by arguing that our brains work via a constrained satisfaction process: our brains distinguish between events and situations they need to care about. Decisions are made using these distinctions, while navigating through the social world. In this sense, there is a relationship between our biological nature, our biological caring and learning system (what is) and morality (what ought) (Churchland, 2011:7).

According to Churchland, many moral philosophers mainly focus on the normative project: 'specifying the rules that would be accepted by all rational persons'. This particular focus is mainly explained because many philosophers commonly accept the idea that because there is a distinction between is and ought and between facts and values, it entails that the normative project is separate with respect to descriptions of the facts. Churchland claims that many philosophers reject her thoughts in *Braintrust* because of the difference between fact and value (Churchland, 2011:186).

Singer argues that the is-ought problem is linked to the question of how morality is to be defined. Is and ought are linked according to Singer because some definitions of morality let us move from statements of facts to moral judgments, while others do not. (Singer, 1973:53) The is-ought problem shows us 'the doctrine that there is an unbridgeable gulf between facts and values, between descriptions of what is and prescriptions of what ought to be' (Singer, 1981:73). So Singer clearly wants to keep the gap between 'is' and 'ought' open.

A more recent version of Hume's 'ought to is' theory is the 'open question argument' by G.E. Moore. Moore is an intuitionist and claims that the good is an object of thought, an intuition, which is induced by aspects of the world (Moore, 1903). Just like yellowness is an object of thought, goodness is also subjective instead of objective. It is a 'psychological entity'. Goodness is undetermined. Moore supports this claim by explaining his open question argument as follows: When someone claims that a natural property is identical with 'good', it is no longer possible to ask 'Is this natural property good?' Moore gives as example the property of happiness. If the property of being pleasurable were identical to the property of being good, then the meaning of happiness and good would be the same.' When you would say the two notions at the same time, this would be a tautology. You can conceive good and the natural property separately and in this way support that they are not the same thing. They are 'two different notions in our minds' according to Moore (Moore, 1903:16). So in short, Moore argued that it is a mistake to relate the thought 'good' with the property or aspect that induced the thought. This mistake he called 'the natural fallacy'. In other word 'pleasure' should not be confused with the meaning of 'good'. The question of whether pleasantness is good is always an open one, this is what Moore argues with the open-question argument. Moore's theory about non-natural properties reinforced that values are completely separate from facts, and the companion idea that facts about our natures cannot tell us anything about what is truly valuable (Churchland, 2011:188).

While the two theories, natural fallacy and the is-ought problem are not completely the same, they do give the same message. If facts about the world cannot tell us what is good or valuable, and therefore cannot tell us what we 'ought to do', we might conclude that nothing in our nature can explain our moral principles. This deduction confirms Singer's thoughts about morality.

According to Singer the natural fallacy is 'defining values in terms of facts' (Singer, 1981:74). Values must provide us with reasons for action. Facts, by themselves, do not provide us with reasons for action. 'No facts about our evolutionary history, our biology or the origins of altruism can compel me to accept any value or any conclusion about what I ought to do' (Singer, 1981:77). Singer claims that there is a gap between facts and values, which is caused because facts do not influence the choice we make. More facts would not make the gap smaller. 'No science is ever going to discover ethical premises inherent in our biological nature, because ethical premises are not the kind of thing discovered by scientific investigation. We do not find our ethical premises in our biological nature, we choose them'. 'Information about my genes does not settle the issue, because I, and not my genes, am making the decision'. (Singer, 1981:77)

Churchland on the one hand agrees with the claim that there is no genetic basis for cooperation or any other specific behaviour but on the other hand argues that the solutions and choices we make are influenced by our inherited 'caring system' and therefore do demonstrate our inner values. These values provide us with knowledge to make better choices. But Churchland also admits that the relation between 'values' and 'the solution' is not as straightforward as I have suggested here. 'Although attachment may be the platform for morality, there is no simple set of steps — no deductive operation, no exactly applicable rule — to take us from "I care, I value" to the best solution to specific moral problems, especially those problems that arise within complex cultures' (Churchland, 2011: 23).

According to Churchland, Moore provided an appealing background for the hypothesis that values are completely separate from facts, and that 'facts about our natures cannot tell us anything about what is truly valuable' (Churchland, 2011:188). But Churchland claims that Moore's arguments are strange. Moore claims that 'there is no answer to the question of what natural properties are identical with the good, or the right or the valuable' because you cannot tell that something is good, since that would mean that good is similar to the natural property or entity described. Churchland tries to show in *Braintrust* that our perceptions are loaded with values, since our brains are organized to value survival and well-being. Perceptions and intuitions are products of our brain. Perceptions leading to general identifications and claims do not require a synonymy of terms she says. According to her, the naturalistic fallacy is at its end because there are many cases in which moral arguments, which are careless of nature, are too abstract to be implemented in reality. Facts about nature can tell us something about what is valuable and the relation between nature and what is good is not simple like Moore says, but complex, Churchland claims. 'As with morals and values, no simple formula will suffice'. But that is precisely the reason why science can teach us, and already taught us a lot about what we 'ought to do' (Churchland, 2011:189).

Chapter 4. Personal considerations

In the previous chapters we have marked a variety of differences between the two moral philosophers Churchland and Singer. According to Churchland, Singer's worldview is unnatural. She believes that the view of utilitarianism; which aims to apply the same standards of caring to distant people as to people close by, is abnormal. It runs counter to our most important biological instincts. In *Braintrust* she argues: 'The urgings of the ardent utilitarian sometimes alarm me the way intrusive do-gooders can be alarming, not least because of infringements on liberty and the conflict with paradigmatically good sense' (Churchland, 2011:189). I can find myself believing that what Churchland says about our instincts to care more about family and friends nearby instead of foreigners is true. Still I am not sure whether it is right to bring in liberty over equality in this context. Also 'good sense' makes me doubt: If I can care about foreigners and people in need and still take care as well of myself and people around me, then that also seems to be 'good sense' to me.

Singer aptly explains this same point: 'Suppose I am considering what to do with my five hundred dollars and someone tells me that since evolution selects only those genes that promote their own survival, my genes are not likely to incline me to altruistic acts toward strangers. I will, however, have genes that prompt me to look after my immediate family and myself. Suppose that I can see no reason to doubt the cogency of this view of evolution. How will this information affect my decision? Do I immediately say: "Oh well, it's just too bad for the Indians, but since my altruism is genetically limited to my kin, I'll use the money on a family holiday"? Of course not. Information about my genes does not settle the issue, because I, and not my genes, am making the decision (Singer, 1981:77).

Reviewing *Braintrust*, I think that Churchland did a good job explaining the existence of a platform for morality and moral decision-making. It remains doubtful though if scientific knowledge can solve moral dilemmas. Churchland describes several ways of how decisions can be made, but she does not say whether one would be better than another. And does the knowledge of our caring brain-based values and the process of constraint satisfaction give any guidance for finding our ways in complex moral dilemmas? Does knowing about the neurobiology accommodating our capacity for moral computation help to solve a relevant moral dilemma? Of course, having more scientific knowledge about our neurobiology is better than not knowing this, but from *Braintrust* it becomes clear that neurobiology contributes relatively little. Churchland correctly lays down how philosophers, especially Hume showed the basis for morality present in nature, but *Braintrust* itself seems to be more a valuable source on the neurobiology of care instead of explaining which moral path we should follow and how this moral basis helps us in making decisions in what we ought to do.

Churchland clearly argues against 'moral rules'. She explains that rules often conflict with each other and that 'The Golden Rule' is much to wide to receive correct directions about what to do. I can agree with these statements. 'Do unto others as you would have them do unto you' does not give a clear idea of what you should do. How much you can do is specific in a certain situation. You do not act out of a certain rule, but you make your decisions rather by reflecting on past experiences and social learning, about what the group regards as right or wrong.

I think that what happens and is often encountered in real life is also true for morality. Whenever I act to satisfy a social expectation, rules are implemented. Helping someone else may come from the intuition that it is good to help others, but it also comes from the social expectation that you should help others when they are in need. When I do something out of an intuition, this will be without applying some rule. Later on you will start thinking about what others would have expected you to do in the situation, and you will start reasoning about the decision you made. Churchland argued that conscience is composed by intuitions giving us directions about what is right and wrong while at the same time being influenced by attachment, our social system and imagination. So yes, of course our neurobiology system, which influences our relationship with others, caring and behaviour, also influences our intuitions. After all, moral dilemmas are typically resolved in a case-based constraint satisfaction process involving emotions, memory, and comparison to past experience. This on the other hand does not imply that knowledge about this system will provide moral directions. Here I argue against Churchland. It is worthwhile to know that our social natures play a role in how we make moral decisions and it would be interesting to know which biological instincts have the most influence in the process of moral decision making. Nevertheless, it remains a human phenomenon, which is influenced by culture and reasoning.

Our oughts might be linked to our is's, like Churchland proposes, but this does not show how we actually operate. As I have argued, we act to satisfy the situation, the social expectation. We infer courses of action from what we see happening around us and from what our intuitions tell us. Our problem solving is not based

on logic, we reason regularly. Whenever I see that someone on the street stumbles, I help him or her back on his or her feet. We reason causally; when I am bleeding I must have scratched or hit myself. This is what our intuitions and our reasoning tell us. Rules are not definitive of morality. Rules do not capture how we negotiate moral dilemma's and solve problems. Values and learning do. But more important is thinking through how people are affected by our actions and thereby being able to reach better solutions: using our intuitions and knowledge to obtain the best results or arrive at the most admirable outcome.

Singer on the other hand says that we cannot trust our intuitions as explained in chapter 2. But in a way, Singer is not really an anti-intuitionist; he believes that only certain intuitions are applicable. He makes a useful distinction between two sorts of intuitions. The ones based on emotion, giving us evolutionary benefits and the others based on reason. Singer says: 'The intuition that tells us that the death of one person is a lesser tragedy than the death of five is not like the intuitions that tell us that we may throw the switch, but not push the stranger off the footbridge. It may be closer to the truth to say that this is a rational intuition' (Singer, 2005:351). Singer argues that some intuitions, the ones about general moral principles are the ones we should rely on, instead of the intuitions in a particular situation. (For example the intuition that it is right to throw the switch in the standard trolley case). But is there a different intention when having intuitions in particular situations in comparison with having intuitions about general principles? It is already difficult to argue that some intuitions give us evolutionary benefits and some do not, but to argue that there is a difference between these situations, while it seems these intuitions come automatically, is even more difficult.

What does become clear when Singer makes this distinction is that he appeals to the idea that morality is universal. Since we can only rely on intuitions that are based on general principles, the ethical output of this intuition can be justified from a universal point of view. 'In accepting that ethical judgments must be made from a universal point of view, I am accepting that my own interests cannot, simply because they are my interests, count more than the interests of anyone else' (Singer, 1993:12). From this follows the view Singer confirms to: utilitarianism. Utilitarianism says that in any scenario, we have a moral duty to act or react by doing what will bring the most happiness/greatest good for the greater amount of people. The relation Singer makes between having a universal morality and therefore having to commit to utilitarianism is too simple. I think that it is often the case that different people have different intuitions about the same case. Intuitions depict ourselves and show our ways of thinking, they do not show the facts or universal aspects they are supposed to be about.

Intuitions cannot be universal and thus morality also cannot. We cannot prove that intuitions are right or wrong, or differentiate between correct or incorrect intuitions, because if we would find a way to do so, intuitions would have no meaning anymore. There is no correction form for specific moral cases and since intuitions are unconscious, we also cannot blame someone for having 'the wrong' intuition.

But is this true? Are intuitions not universal and is morality therefore not universal? Not all intuitions are reliable. When someone is prejudiced and acts out of intuition, should that be accepted as 'correct'? The same for morality: our basic moral laws need to be universal in order to live in society. Whenever someone has the intuition that stealing is good, we have a basic moral law that says the opposite: stealing is bad. We, as a society decided that it is not good, but is this decision not also based on intuitions? Who determines that it should be a universal moral rule? It remains a difficult dilemma whether we can rely on our intuitions to know what we should or not should do. This is because we do not know whether our intuitions are correct or incorrect.

Another philosopher who questioned the notion of morality is the British philosopher Jonathan Bennett. In The Conscience of Huckleberry Finn Bennett explains the conflict between sympathy and bad morality. In this piece Bennett sketches three different characters and situations. One of them is Huck Finn who does not live by principles, but acts according to the mood of the moment. Bennett says: 'Since the morality he is rejecting is narrow and cruel, and his sympathies are broad and kind, the results will be good. But moral principles are good to have, because they help to protect one from acting badly at moments when one's sympathies happen to be in abeyance' (Bennett, 1974:8). Bennett argues that there is a role for sympathy in moral decisions, since there is no ethical theory with an objective, correct right and wrong. Bennett explains 'We cannot look at our own moralities and declare them bad. This is not arrogance: it is obviously incoherent for someone to declare the system of moral principles that he accepts to be bad, just as one cannot coherently say of anything that one believes it but it is false. Still, although I can't point to any of my beliefs and say 'That is false', I don't doubt that some of my beliefs are false; and so I should try to remain open to correction. Similarly, I accept every single item in my morality — that is inevitable — but I am sure that my morality could be improved, which is to say that it could undergo changes, which I should be glad of once I had made them. So I must try to keep my morality open to revision, exposing it to whatever valid pressures there are — including pressures from my sympathies' (Bennett, 1974:9).

We do not know whether our intuitions are correct or incorrect, so they should be open for correction. Bennett claims that sympathy plays a role in morality, which is something I can relate to. With Singer's emphasis on reason, which he says provides universal principles to our biologically inherited feelings, the importance of compassion and emotions is nullified. Morality needs care and concern, empathy with what is going on in the situation/moral case. Churchland emphasised the importance of attachment and caring for others in relation to morality. Although as I said before, this gives no direction for which moral decisions need to be made, I do agree with Churchland that life is about personal attachments. In his emphasis on impartiality, Singer forgets the powerfulness of relationships that in my eyes is very important for ethical character and morality. Churchland is trying to close the gap between is and ought, while Singer tries to keep it open. I would not close the gap between 'is' and 'ought'. There is no theory that can say what we ought to do or send us in a moral direction, based on what is or what we know. There is no way to determine if one's morality is bad, it remains open for discussion. We can rely on our intuitions as long as we leave them open for discussion. And this discussion should be influenced by reason, but also by attachment, sympathy and emotions.

Concluding remarks

In this paper I tried to carefully explain Patricia Churchland's and Peter Singer's thoughts on morality. There are numerous differences between the two views. Churchland clearly considers scientific investigation of brain-based values to be very important. According to her it tells us why we have certain intuitions. Science has an important role in teaching us what we ought to do. According to Churchland, the process of constraint satisfaction and the system of caring for people nearby are the most important reasons why we have certain moral values. More knowledge about this process, how it works and what it implies, will shed more light on our moral practices.

Singer on the other hand does not believe that there is an influential relation between evolution and the path of moral progress. Scientific investigation or knowledge cannot provide us any premises for morality. Moral intuitions might be part of our nature, but that is no reason to rely on them. We should only rely on the intuitions of general moral principles. This makes morality universal according to Singer, which is a reason for him to argue that utilitarianism is the best ethical theory, the one theory everyone should follow.

In this paper we have also considered theories about naturalistic fallacy taken from David Hume and G.E. Moore. What Churchland points out in *Braintrust* is that our moral ought is strongly linked to our is. Morality is part of our biological nature. Our caring system produces values to provide a system for problem solving and helps us to act morally in specific situations. Singer on the other hand claims that values must provide us with reasons for action. Facts, by themselves, do not provide us with reasons for action.

In the last chapter, I gave my own views on both philosophers. They both have imperfections in their arguments and parts with which I do not agree. Singer in my opinion neglects compassion and emotion in his thoughts about morality and while Churchland emphasizes on the importance between relations and caring, her theories in *Braintrust* do not provide a strong argumentation that scientific knowledge can give us clear directions in morality. Theories about where morality comes from are useful to retrieve a better understanding of ourselves and of our moral values, but they cannot send us into a moral direction. There is no way to determine if one's morality is bad, it remains open for discussion. Discussions about morality should be influenced by reason, attachment, sympathy and emotions.

At the start of this paper I talked about the differences between me and my brother. There is not a clear answer on where our morality comes from and whether the knowledge about this origin will provide us with morality or rules how to act or behave. Discussions about the different manners, choices and believes my brother and I both have, is open. We cannot say that one's moral path is good and the other's path is bad, but we should leave them open for correction. Our paths are corrected while we live our lives and in this way we receive our own directions and make our own choices. We both receive different influences and in the end, disregarding the origin of morality, we find our own ways in 'how we ought to live our lives'.

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