Moral Intuitions, Moral Expertise and Moral Reasoning[1]

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In this article I examine the consequences of the dominance of intuitive thinking in moral judging and deciding for the role of moral reasoning in moral education. I argue that evidence for the reliability of moral intuitions is lacking. We cannot determine when we can trust our intuitive moral judgements. Deliberate and critical reasoning is needed, but it cannot replace intuitive thinking. Following Robin Hogarth, I argue that intuitive judgements can be improved. The expertise model for moral development, proposed by Hubert and Stuart Dreyfus, not only teaches us how we acquire intuitive moral judgements, it also shows the interconnectedness of intuitive thinking and deliberate reasoning. Analysing the expertise model in more detail, I show that it cannot do justice to the importance of reasoning skills. Reasoning skills are needed because we expect people to be able to argue for their standpoints. I conclude that moral education should not only aim at improving intuitive moral judgements, but also at acquiring reasoning skills.

1. INTRODUCTION

Ideas about moral education are always influenced by theories of moral development. For Lawrence Kohlberg, moral development consists of the development of less egocentric and more impartial modes of reasoning on more complex issues. In his view, the goal of moral education is to encourage children to develop from one to the next higher stage into the developmental process. He considered presenting children with moral dilemmas as an important tool, but also stressed the need for learning how to cooperate in a community. Moral reasoning and cooperation are also important themes for moral philosophers. Within Kohlberg's views on moral development, moral psychology and moral philosophy are closely related disciplines. Kohlberg's views were strongly influenced by rationalist (neo-)Kantian moral philosophers, above all by John Rawls.[2] The rationalism in both Kohlberg's theory of moral development and his ideas about moral education were heavily criticised, e.g. by Carol Gilligan (1982) and Martin Hoffman (2000). A newcomer in the company of

Kohlberg critics is the social psychologist Jonathan Haidt. Haidt also criticises the dominance of rationalist models in moral psychology, but the focus of his criticism is a different one. Referring to recent empirical studies he argues that most of our judgements are not the outcome of conscious reasoning (Haidt, 2001, p. 814). Moral judgements are, to a large extent, intuitive and automatic responses to challenges, elicited without awareness of underlying mental processes (Bargh, 1999; Bargh and Chartrand, 1999). Intuitive moral judgements stem from an ancient, automatic, very fast affective part of the human brain, while moral reasoning takes place within the phylogenetically newer, slower, motivationally weaker cognitive system.

Haidt's publications made psychological studies of moral intuitions widely known (Haidt, 2001, 2007; Haidt and Bjorklund, 2008). He is part of a long tradition of psychological research into the differences between two cognitive processes: the unconscious intuitive process and the conscious rational process (Bargh, 1999; Bargh and Chartrand, 1999; Sloman, 1996; Stanovich and West, 2000; Wilson, 2002). Haidt defines moral intuition as:

> . . . the sudden appearance in consciousness of a moral judgment, including an affective valence (good–bad, like–dislike), without any awareness of having gone through steps of searching, weighing evidence, or inferring a moral conclusion. Moral intuition is therefore the psychological process that the Scottish philosophers talked about, a process akin to aesthetic judgment. One sees or hears about an event and one instantly feels approval or disapproval (Haidt, 2001, p. 818).[3]

Haidt's intuitionism is a part of his larger psychological theory of morality. Another part is his view that especially philosophers and moral psychologists working within the rationalist tradition overestimate the causal role of formal reasoning in moral judgement (p. 815). He argues that moral judgements, besides being largely intuitive, typically amount to post hoc reasoning with a defensive character after a judgement has been made (pp. 818 f.). Moral reasoning is similar to the reasoning of lawyers who construct justifications for antecedent intuitive judgements (pp. 820 f.). People may at times reason their way to a judgement by sheer force of logic, overriding their initial intuition. However, such reasoning is rare (p. 819). Moreover, referring to sources such as August Blasi's review on the literature on moral cognition and moral action (Blasi, 1980), Haidt states that the relation between moral reasoning and moral action is much weaker than that between moral emotion and moral action (pp. 823 f.).). All in all, Haidt thinks that recent empirical studies confirm David Hume's views on the role of reason in morality, and not those of Immanuel Kant.

Haidt's theory is a challenge to both educationalists and moral philosophers. Educationalists need to know what it means for moral education that a large part of our moral judgements are intuitive. Moral philosophers need to find out whether it still makes sense to stress the importance of critical moral reasoning, considering that moral judgements are largely intuitive and that moral reasoning is largely post hoc, while

deliberate reasoning is rare. However, Haidt's view that deliberate reasoning is rare, has been criticised by both psychologists and moral philosophers. They argue that Haidt's views are unable to do justice to the actual role of deliberative reasoning (Pizarro and Bloom, 2001; Saltzstein and Kasachkoff, 2004).[4] Thus, moral philosophers can still claim that theories on and expertise in moral reasoning are needed for improving deliberate reasoning. Moreover, Haidt himself stresses that his theory is descriptive and not prescriptive. Moral philosophers may take the stance that deliberate reasoning is not only needed for complementing intuitive moral thinking, but also for the critical examination of the validity of intuitive moral judgements. But this is only a viable option if moral philosophers succeed in showing that there are legitimate doubts on the validity, trustworthiness or reliability of intuitive moral judgements.

In this article I examine the implications of psychological intuitionism for the role of moral reasoning in moral education.[5] In sections 2 and 3 I discuss the reliability of intuitions. I argue that recent studies into the reliability of moral intuitions do not warrant the conclusion that deliberate and critical reasoning is superfluous. In section 4 I discuss Hogarth's view that we must, in order to understand and improve intuitions, understand the process by which they are acquired (Hogarth, 2001, p. 194). According to Hogarth, people can be seen as 'intuitive experts' in specific domains, also in the domain of morality. We can therefore make use of theories about the acquisition of practical skills to gain insight into the process of the education of moral intuitions. In section 5 I describe Hubert and Stuart Dreyfus' well-known model of expertise acquisition which they consider to be also applicable to the domain of moral development and education (Dreyfus and Dreyfus, 1991). In their model of moral expertise, deliberate reasoning is still needed, but as I argue in section 6, their view on deliberate reasoning is inadequate. In section 7 I argue that learning moral reasoning still needs to be a part of moral education.

2. PSYCHOLOGISTS' VIEWS ON THE RELIABILITY OF MORAL INTUITIONS

Psychologists think of moral intuition as belonging to the general category of social cognition, where this has to do with information processing involved in navigating the social world. According to Jim Woodward and John Allman (2007), one role of social emotions and of moral intuition is to help overcome the limitations of purely analytical or rule-based decision making procedures such as cost-benefit analysis. The problem, they say, with trying to make moral decisions on a purely analytical basis is that we will quite likely leave out (or fail to pay sufficient attention to or to be motivated by) considerations that are important even from a cost-benefit perspective. The number of different dimensions or different kinds of consideration that human beings are able to fully take into account in explicit conscious rule-guided decision making is fairly small (2007, pp. 194ff). As evidence, they refer to a study by psychologists Ab

Dijksterhuis and his colleagues (2006), who in an experiment presented subjects with a choice among different car models. In one situation (the simple condition) the cars were characterised by a small number of favourable or unfavourable attributes in different combinations (e.g. one car would have three favourable attributes and a single unfavourable one, another the opposite profile). In another instance, the cars were characterised by a large number of such attributes. Subjects were then either (a) asked to think about the cars for four minutes before choosing a favourite car (conscious thought condition) or (b) were distracted for four minutes by another task that required their attention and then asked to choose (unconscious thought condition). In the second situation (b), subjects made normatively good choices (as measured by the number of favourable attributes the chosen car had) for cars with both simple and complex attributes, with no difference between these two conditions. In the conscious condition, the performance in the simple attribute task was about the same as the performance in the unconscious thought task, but performance in the complex attribute task was markedly inferior.

Woodward and Allman think that the results of these and other studies suggest that unconscious processing can sometimes lead to better decisions than conscious deliberation, at least when the decisions involved are 'personal' or 'prudential'. They argue that there is sufficient similarity between social intuitions and moral intuitions to derive conclusions on the reliability of moral intuitions from studies on the reliability of social intuitions. They hold that when what we call a moral intuition is functioning in a 'normatively appropriate way', it will reflect the operation of the adaptive unconscious on a range of relevant considerations and experiences, issuing a similar sort of gut feeling about the appropriateness or inappropriateness of some course of action. If Woodward and Allman are right, we may assume that psychological moral intuitions will at least sometimes lead to judgements/decisions that are superior to those arrived at on the basis of more deliberative and rule-based decision strategies (2007, p. 185). However, much depends on whether they are right in suggesting that there is sufficient similarity between social and moral intuitions.

Social intuitions function within the interpersonal domain. The understanding of, e.g. the behaviour, emotions and facial expressions of others is largely intuitive. Intuitive judgements also guide how we present ourselves to others. These kinds of intuition are surely relevant for some of our moral decisions, but they are of no help when judging, e.g. whether sex between brother and sister is right, or for decisions on issues of life and death. So I do not think we are justified in basing conclusions regarding the reliability of moral intuitions on studies into reliability of social moral intuitions. I do not deny that intuitive moral judgements may sometimes lead to decisions that are superior to those arrived at on the basis of conscious moral deliberation. However, this should be established by specific studies into the reliability of moral intuitions.

In many domains we can determine the reliability of intuitions because there is a broad agreement on the relevant criteria. The subjects in Dijksterhuis' experiment seem to know which attributes a favourable car

should have. Knowing that, it is possible to check retrospectively how many of these attributes the chosen cars actually possessed. If we know what the criteria for a correct moral decision on a specific issue are, we could design an experiment similar to that of Dijksterhuis. There are moral cases where there is an agreement on the relevant criteria. Imagine that a team of doctors has to decide which patient on the waiting list should get a donor heart. They agree that the donor heart should be allocated to the patient who needs it most. The simple condition could be that there are only three single white male candidates who are characterised by a small number of relevant features: how much they are in pain and how long they can survive without a donor heart. In the complex condition one of the candidates is a young white divorced male who has to care for three children under ten years, another a white female drug addict, and the third a married black male without children. The candidates differ with respect to the duration of their heart problem, the amount of suffering, their length of survival without a new heart, and the chances of a successful transplantation. Deliberate decision-making requires that all the candidates should get scores relevant for determining their neediness. Contrary to the complex condition, there is no difficulty in comparing and weighing the scores in the simple condition. If the analogy between social and moral intuitions holds, intuitive thinking should lead to the best decision in the complex condition. My fictitious case, however, is not representative for situations in which moral decisions are required. In many cases we do not know what the right criteria are for evaluating our moral judgements and decisions. Take for example decisions on the genetic modification of animals for the production of medicines or on the provision of prenatal genetic diagnosis. Contrary to my fictitious case, it is impossible in such cases to determine retrospectively whether an intuitive judgement is superior to a reasoned judgement.

3. A PHILOSOPHER'S DOUBTS ABOUT THE RELIABILITY OF INTUITIVE MORAL JUDGEMENTS

When psychologists say that intuitive judgements are more reliable they mean that they generally result in better decisions. Philosophers who discuss the reliability of intuitions, relate reliability to justificatory force. You can trust intuitions when they are justified. If it is true that intuitive thinking generally leads to the best decisions within complex social situations, we are justified in following our intuitive judgements when we are confronted with such a situation. However, it is not the intuition as such which provides us reasons for believing that the underlying judgement is true and may serve as a basis for our actions. When a sufficient number of empirical studies have shown that intuitive judgements on complex cases are (generally) more reliable than reasoned judgements, we are justified in acting upon an intuitive judgement.

Epistemologists distinguish between inferential and non-inferential justification. Inferential reasoning is premise-based; its conclusion is

inferentially grounded on its premises. Non-inferential reasoning is non-linear and in a certain sense global. It yields conclusions based on reflection rather than inference (Audi, 2004, p. 198). Assuming that there is sufficient evidence of the reliability of social intuitions on complex issues in the interpersonal domain, giving normative authority to these intuitions can be justified by inferential reasoning. If we cannot establish the reliability of intuitive moral judgements on complex cases by empirical research, we are not justified in giving any authority to these judgements unless we can show that intuitive moral judgements should also be regarded as intuitions in the epistemic sense. I will not deal with this question here. I argue elsewhere, referring to Michel Huemer's views (Huemer, 2005)[6] that moral intuitions are seemings, the justificatory force of which is influenced by the reliability of the belief producing procedures and by a subject's competence in applying moral concepts. Subjects after reflecting on their intuitive judgements, may come to realise that the beliefs expressed by these judgements, are basic to them. Subjects may come to conclude that they cannot further justify, and need not further justify, these beliefs. In other words, reflection on an intuitive judgement may evoke a sense of non-inferential credibility. The psychological moral intuition then becomes an epistemic moral intuition (Musschenga, 2008b).

According to many epistemologists intuitions do not need inferential justification. Some studies suggest that the processes that result in our beliefs are often subject to distorting influences. Referring to these studies, Walter Sinnott-Armstrong (2006, 2008) attacks moral intuitionism. In his view, these studies show that we cannot claim non-inferential justification for our moral intuitions. If he is right, we can never be prima facie epistemically justified in trusting our intuitive moral judgements.

In his 2006 article Sinnott-Armstrong starts with developing general 'principles of epistemic need', which he later applies to moral beliefs. Confirmation is needed for a believer to be justified when the believer is partial (principle 1), when people disagree with no independent reason to prefer one belief or believer to the other (principle 2), when the believer is emotional in a way that clouds judgement (principle 3), when the circumstances are conducive to illusion (principle 4), and when the belief arises from an unreliable or disputable source (principle 5).

Principle 1

We cannot be justified in assuming that any of us is ever fully impartial, says Sinnott-Armstrong (p. 348). Partiality is so common in the area of morality and so difficult to discover in ourselves, that this creates a need for confirmation of moral beliefs according to principle 1.

Principle 2

Part of moral disagreements can be explained by the fact that people use different concepts and have different non-moral beliefs. Straightening out

our concepts and non-moral beliefs seems unlikely to solve all apparent moral disagreements, according to Sinnott-Armstrong. Principle 2 says that this also creates a need for confirmation (p. 350).

Principle 3

It can hardly be disputed that partiality influences moral judgements and that moral disagreements are often intractable; there is no agreement on the role of emotions in moral judgements. Sinnott-Armstrong refers to a number of studies that indicate that emotions can indeed cloud moral judgements, amongst them the studies of philosopher Josuah Greene and his colleagues. Greene and his colleagues have become famous by research in which they made fMRI scans of the brain activity of research subjects while they were responding to a series of personal and impersonal moral dilemmas as well as to non-moral dilemmas, all of which involved complex narratives (Greene *et al*., 2004). The trolley problem is an example of an impersonal dilemma, while the footbridge dilemma is an example of a personal moral dilemma.[7] Greene *et al*. found that, responding to personal moral dilemmas, as compared to impersonal and non-moral dilemmas, produced increased activity in areas associated with social/emotional processing: medial frontal gyrus, posterior cingulated gyrus, and bilateral STS. In contrast, impersonal and non-moral dilemmas as compared to personal moral dilemmas, produced increased activity in areas associated with working memory: dorsolateral prefrontal and parietal areas (Greene *et al*., 2001). The differences in these intuitive responses are due to differences in the emotional pull of situations that involve bringing about someone's death personally, in a direct way, and causing his death at a distance, and less personally. Sinnott-Armstrong suggests that the increased activity in areas associated with social/emotional processing might indicate that, when confronted with personal dilemmas, emotions block subjects from considering the many factors in these cases (p. 351). He finds additional evidence in Wheatley and Haidt (2005). They gave subjects the post-hypnotic suggestion that they would feel a pang of disgust whenever they saw either the word 'take' or the word 'often'. The subjects were later asked to make moral judgements about six stories designed to elicit mild to moderate disgust. It turned out that when a story contained one of these words, the subjects were more likely to express stronger condemnation of acts in the story. The presence of these words in stories elicits feelings of disgust that influence the moral judgements on acts described in the story. Such influence is irrational. That is why Sinnott-Armstrong thinks that the emotion of disgust clouds the judgement. Because independently caused emotions can distort moral beliefs, believers need confirmation in order to be justified in holding their moral beliefs (p. 352).

Principle 4

Confirmation is also needed, says Sinnott-Armstrong, when the circumstances are conducive to illusion. He mentions three kinds of illusion. The

first one occurs when appearances and beliefs depend on context. Here he refers to Peter Unger (1996, pp. 88-94) who found out that the order in which options are presented affects beliefs about whether an option is morally wrong. People's moral beliefs about a certain option depend on whether that option is presented as part of a pair or, instead, as part of a series that includes additional options intermediate between the original pair. The second kind of illusions arises from over-generalisations. Illusions caused by heuristics are the third kind. However, it is not clear why he makes a distinction between these two kinds, while the studies he refers to all relate to problems caused by the use of heuristics. Moral heuristics often represent generalisations from a range of problems for which they are well-suited. According to Jonathan Baron (1994) and Cass Sunstein (2005) moral heuristics become a problem when they are wrenched out of context and treated as freestanding or universal principles, applicable to situations in which their justifications no longer operate. A heuristic which Sunstein suggests is 'Do not play God' or, in secular terms 'Do not tamper with nature'. He thinks that this heuristic might explain the wide-spread repugnance against e.g. cloning.

Principle 5

In addition to the three kinds of illusion that we already discussed, Sinnott-Armstrong mentions the influence of framing effects. He discusses framing effects more extensively in Sinnott-Armstrong (2008). The kind of framing effects he has in mind, are effects that wording and context have on moral intuitions. A person's belief is subject to a *word* framing effect when whether the person holds the belief depends on the words used to describe what the belief is about. If I want my wife to believe that I did not drink too much wine, and she does believe me when I say that the bottle is still half full, but does not believe me when I say that the bottle is now half empty, then her belief is subject to a word framing effect. My daughter has a boy-friend from Ecuador. If you see them together on a photograph, you might think she is tall. But if you see her among a group of young Dutch adults of the same age, you would say she is small. In this case the belief about my daughter's height is subject to a *context* framing effect. A special kind of context framing effect involves *order*. If you see my daughter amidst a group of female basketball players first, and besides her boy friend next, you will still consider her small. This is because of the framing of the first impression. Sinnott-Armstrong reviews a number of studies of the influence of framing effects on moral beliefs. Psychologists Amos Tversky and Daniel Kahneman (1981) have shown that in choosing between options involving risks, subjects were risk averse when results were described in positive terms (such as 'lives saved') but risk seeking when results were described in negative terms (such as 'lives lost' or 'deaths'). Lewis Petrinovich and Patrick O'Neill (1996) found framing effects in various descriptions of the trolley problem. They asked 387 students in one class and 60 students in another class how strongly they

agreed or disagreed with given alternatives in twenty-one variations of the trolley case. The trick lay in the wording. Half of the questionnaires used 'kill' wordings so that subjects faced a choice between (1) 'throw the switch which will result in the death of the one innocent person on the side track' and (2) 'do nothing which will result in the death of the five innocent people.' The other half of the questionnaires used 'save' wordings, so that subjects faced a choice between (1*) 'throw the switch which will result in the five innocent people on the main track being saved' and (2*) 'do nothing which will result in the one innocent person being saved.' It turned out that wording affected not only strength of agreement (whether a subject agreed slightly or moderately) but also whether subjects agreed or disagreed: 'the Save wording resulted in a greater likelihood that people would absolutely agree' (Petrinovich and O'Neill, 1996, p. 152).

Sinnott-Armstrong's last principle of epistemic need holds that confirmation is needed when the belief arises from an unreliable or disputable source. The origins of moral beliefs might be problematic in two ways. First, moral beliefs might be caused by factors that are unrelated to the truth of those beliefs. Second, the origins of moral beliefs might be immoral according to those beliefs. E.g. moral beliefs may reflect the interests of the dominant social class while at the same time condemning the very power that leads to these beliefs, as is argued by Nietzsche with regard to Christian morality (Sinnott-Armstrong, 2006, p. 356).

4. EDUCATING MORAL INTUITIONS

The obvious conclusion from the previous sections seems to be that we cannot trust our intuitive judgements. We should always test them in a process of deliberate reasoning. But we often lack the time for reasoning. We have to act upon intuitive judgements that we cannot trust. Fortunately, another possibility to improve our moral judgements is to educate our moral intuitions. Because intuitive processes operate beyond consciousness, says Hogarth, intuitions can essentially be considered faits accomplits, which implies that they must be dealt with *after* the fact. In order to understand and improve intuitions, we must understand *the processes by which they are acquired* (Hogarth, 2001, p. 194). Intuitions embody tacit or implicit knowledge acquired through learning processes, through experience. The process by which we learn is largely tacit. Hogarth stresses that the process by which we learn valid beliefs is the same process that leads to acquiring superstitions and other erroneous beliefs (p. 85). Critical to acquiring valid beliefs are the structures that guide the learning process. In *kind* learning environments, people receive accurate and timely feedback that allows the tacit system to shape accurate responses. In *wicked* learning environments feedback is lacking or misleading and people can learn to have confidence in responses that are quite inaccurate. A gang of criminal youngsters, the mob or a family in which both parents are criminals are surely examples of a wicked environment for acquiring moral intuitions. The distinction between

wicked and kind learning environments is based on the analysis of learning situations originally developed by Einhorn and Hogarth (1978) which showed that, even in fairly simple tasks, the feedback people receive on their judgements can be distorted by many factors, including the very actions that they themselves take. For example, the fact that you take a particular action can prevent you from learning about possible outcomes associated with the actions you did not take. The key point is, according to Hogarth, that the accuracy and timeliness of feedback affects the quality of the intuitions we acquire through tacit learning processes. You cannot learn from feedback you do not receive and some feedback may simply act to increase confidence in erroneous beliefs (Hogarth, 2002, pp. 19f). In short, the quality of intuitions is dependent on several important variables: the quality of feedback, the nature of the learning environment, and also the corpus of knowledge stored in long-term memory.

5. MORAL INTUITION AND MORAL EXPERTISE

It is not uncommon among psychologists to see a connection between intuitive judgements and expert judgements (Hogarth, 2002; Woodward and Allman, 2007). Intuition acquired tacitly through experience, says Hogarth, is similar to tacit knowledge underlying practical intelligence (Hogarth, 2002, p. 245). People can be seen as 'intuitive experts' in specific domains, also in the domain of morality. If this view is correct, we can make use of theories on the acquisition of practical skills to gain insight into the process of the education of moral intuitions.

A well-known model is that of Hubert and Stuart Dreyfus (1991) who suggest that the process of acquisition of ethical skills might follow the same course as the acquisition of practical skills such as driving and playing chess. These authors distinguish between five stages of skill acquisition. In the first stage, that of *novice*, the instruction process begins with the instructor decomposing the task environment into context-free features which the beginner can recognize without benefit of experience. The beginner is then given rules for determining actions on the basis of these features, like a computer following a programme (p. 232). The second stage is that of the *advanced beginner*. As the novice gains experience through actually coping with real situations, he begins to note, or an instructor points out, perspicuous examples of meaningful additional components of the situation. After seeing a sufficient number of examples, the student learns to recognize them. Instructional *maxims* now can refer to these new *situational aspects* (p. 233).[8] In the third stage, that of *competence*, with increasing experience the number of features and aspects to be taken account of becomes overwhelming. To cope with this explosion of information, the performer learns to adopt a hierarchical view of decision making. By first choosing a plan, goal or perspective which organizes the situation and by then examining only the small set of features and aspects that he has learned are relevant given that plan, the performer can simplify and improve his performance. Choosing a plan,

goal or perspective is no simple matter for the competent performer. Nobody gives him any rules for how to choose a perspective, so he has to make up various rules which he then adopts or discards in various situations depending on how they work out. This procedure is frustrating however, since each rule works on some occasions and fails on others, and no set of objective features and aspects correlates strongly with these successes and failures. Nonetheless, the choice is unavoidable (pp. 233f). The fourth stage is that of *proficiency*. Having experienced many emotion-laden situations, having chosen plans in each, and having obtained vivid, emotional demonstrations of the adequacy or inadequacy of the plan, the skilled performer 'notices,' or 'is struck by' a certain plan, goal or perspective. No longer is the spell of involvement broken by detached conscious planning (p. 234). When the last stage, that of *expertise*, is reached, the proficient performer, *sees* what needs to be done, but must *decide* how to do it. With enough experience in a variety of situations, all seen from the same perspective but requiring different tactical decisions, the proficient performer seems gradually to decompose this class of situations into subclasses, each of which shares the same decision, action, or tactic. This allows an immediate intuitive response to each situation (p. 235).

In ordinary language, experts are people who have more knowledge and more refined skills than laypersons. Dreyfus and Dreyfus use the term to refer to the tacit knowledge and the skills that we need to operate in domains of everyday life. People who drive cars are experts. Having a driving licence, I am, in the eyes of the Dreyfuses, an expert in driving cars. But my skills in driving a car cannot be compared to those of a Formula I racer. This point is nicely formulated by Selinger and Crease (2002, p. 258): 'We do not call people who are merely ambulatory or verbal "expert" walkers or talkers, but reserve the adjective for those who undergo special training, give professional advice, etc.' According to the Dreyfuses, someone who had a normal, successful moral education—is a moral expert. What they call moral experts can be better described as ordinary, morally competent persons. While individuals keep being confronted with new situations and new problems, moral development never really ends and needs to continue in adult life. This is recognised by Hogarth. He states that, although the moral character of people already has a clear shape in adolescence, intuitive moral thinking can still be improved in the years thereafter. Hogarth has written an entire book about the education of intuition in general (Hogarth, 2001). His framework for developing intuition has three components: 1) creating awareness, 2) acquiring specific learning skills, and 3) practice. With respect to the first point, awareness, he says

> A failure to engage the deliberate system implies an essentially passive attitude towards life. Such a life is one in which you learn from experience but in which you play no role in choosing your experiences. You become simply the product of what happens to you. What is clearly required is a proactive attitude whereby people become more active managers of their information-processing resources. Both the tacit and the

deliberate system have their advantages and disadvantages. But they must be managed. For most people this implies more active use of the deliberate system. Paradoxically, one result from educating your intuition will be that you allocate more time to directing your deliberate thought processes (Hogarth, 2001, pp. 223f.).

Not all parts of Hogarth's account of educating intuitive thinking are relevant for educating moral intuitions. What he says in the second point, acquiring specific learning skills, boils down to incorporating principles of scientific reasoning, to 'making scientific reasoning more intuitive'. It is not clear what to make of incorporating principles of scientific reasoning in moral thinking. In the third point, practice or practising skills of intuition, he asks attention for building in circuit-breakers that force one to seek feedback.

The expertise model shows us what the course of a sound moral development is. It enables us to determine where and how deficiencies in moral development may occur.

6. MORAL INTUITIONS AND MORAL DELIBERATION

Dreyfus and Dreyfus regard their model of moral expertise acquisition as an alternative to the intellectualist models of Jean Piaget and Lawrence Kohlberg. In contrast to these proponents of the idea that moral development essentially is a form of cognitive development, the Dreyfuses think that moral development does not consist of going through a number of successive stages of cognitive development, of learning how to apply moral principles. The moral expert is not an expert in applying moral principles. Moral principles are aids for the inexperienced, for those who still need instruction. On the highest stage in the model of expertise acquisition, the expert leaves rules and principles behind and develops more and more refined ethical responses (Dreyfus and Dreyfus, 1991, p. 237).

It would be a mistake, the Dreyfuses remark, to think that the expert does not deliberate. Expert deliberation is not inferior to intuition, neither is it a self-sufficient activity that can do without intuition: it is based on intuition (Dreyfus and Dreyfus, 1991, p. 240). Not all deliberation by experts is based on intuition. They distinguish between *involved* deliberation which occurs when an expert is facing a familiar but problematic situation, and *detached* deliberation when an expert, in a novel situation in which he has no intuition at all, must resort to abstract principles, like a beginner. In the former situation the expert does not stand back to apply abstract principles; rather, he deliberates about the appropriateness of his intuitions (pp. 240f). Detached deliberation, in which an appeal to principles is unavoidable, is only required in 'cases of total breakdown' (p. 247).

I do not agree with the Dreyfuses that morally competent persons only need principles in cases of total breakdown, but I cannot discuss this here.[9] I limit myself to three critical remarks that are relevant for the place of moral reasoning in their account.

First, Hogarth is, more than the Dreyfuses, convinced of the permanent interplay of intuitive thinking and deliberate reasoning. Deliberate reasoning is not only needed to complement intuitive thinking, but sometimes also to criticise and override intuitive judgements. Guthrie and his colleagues who studied judicial decision making, state that an important component of good judgement is to know when we can, or have to, rely on intuitive judgements and when we have to override them by deliberation (Guthrie *et al*., p. 9). Amending Guthrie, I would say that good judgement requires educated intuitions and insight in when we have to override them by deliberation.

Second, moral experts—competent moral persons—may be able to handle moral issues that arise in everyday moral life, but their general moral competence does not suffice for novel situations they meet when they get a job, join a profession and engage themselves in public and political life. After adolescence, individuals need to play an active role in the development of their intuitive thinking. The education of intuition does not solely consist of explicit training of intuitive thought; practising analytical skills in reasoning can also make a contribution. When such reasoning is assimilated, Hogarth says, people can learn to use analytic tools in a tacit mode (Hogarth, 2002, p. 35). The acquisition and training of reasoning skills is even more important for the education of moral intuitions in adult life than during childhood and adolescence.

My third critical remark is closely related to the previous one. The Dreyfuses suggest that the skills that people develop in the course of moral development are mainly skills for solving problems and making decisions. Moreover, they seem to regard experts as soloists, not as team workers. But ethics is not only about how individual 'experts' can find the right solution to practical problems. Ethics is also about how to shape moral discussions and moral debates, e.g. in professional and public life. Sometimes the aim of such discussions and debates is to find a collective answer to novel problems. More often debates take place, not when participants for themselves lack an answer to problems, but when they disagree about what the right answer is. Needed then are reasoning skills—skills in argumentation and justification. Narvaez and Lapsey (2005) underline that persons moving from a less-expert status to a more-expert status, get better, not only at performing and solving problems in the domain but also in explaining their action choices. Reasoning skills may not be necessary for finding the right answers to moral problems, but you cannot participate in collective debates without having them. The Dreyfuses recognise the need for deliberation, but not of argumentation and justification. Deliberation of experts seems for them to be a private business. In their view, it is even hardly possible for experts to defend their decisions. To defend their decisions, experts need to make a rational reconstruction of underlying reasons. The Dreyfuses think that rational reconstruction of expert decisions can never be accurate because it is an attempt to represent a process that is in principle unrepresentable (Dreyfus and Dreyfus, 1986, p. 196). Rational reconstruction is even not enough

because it only focuses on the discovery of answers and solutions, not on their justification. Participants in a public debate need not only to be able to explain their standpoints to others; they are expected to exchange arguments that might convince others.

7. THE ROLE OF MORAL REASONING WITHIN MORAL EDUCATION

I argued that evidence for the reliability of moral intuitions is lacking. We cannot determine when we can trust our intuitive moral judgements. Moral philosophers might conclude from these studies that intuitive thinking is, at least in the domain of morality, inferior and should give way to deliberate and critical reasoning. I do not share that conclusion. Deliberate and critical reasoning is needed, but it cannot replace intuitive thinking. Following Robin Hogarth, I argued that intuitive judgements can be improved. The expertise model of moral development, proposed by Hubert and Stuart Dreyfus, not only teaches us how we acquire intuitive moral judgements, it also shows the interconnectedness of intuitive thinking and deliberate reasoning. Analysing the expertise model in more detail, I showed that it cannot do justice to the importance of reasoning skills. Deliberate reasoning is not only needed to complement intuitive thinking, but sometimes also to criticise and override intuitive judgements. Reasoning skills are also needed because we expect people to be able to argue for their standpoints. I conclude that moral education should not only aim at improving intuitive moral judgements, but also at acquiring reasoning skills.

Fortunately, some moral educationalists who represent moral development as the acquisition of expertise do realise the need for learning to reason. Based on psychologist James Rest's review of developmental research (Rest, 1983), psychologist Darcia Narvaez and her colleagues identified the skills of persons with a good character (Narvaez, Bock and Endicott, 2003). These skills extend Rest's four psychological distinct processes (ethical sensitivity, ethical judgement, ethical motivation and ethical action) by outlining a set of social, personal and citizenship skills. The skills in the area of ethical judgement include 'skills for general reasoning' and 'skills for reasoning ethically' (Narvaez and Lapsey, 2005, p. 156). Narvaez and Lapsey distinguish four 'levels of skill instruction': 'immersion in examples and opportunities', 'attention to facts and skills', 'practice procedures', and 'integrate knowledge and procedures' (p. 159). It doesn't become clear from Narvaez and Lapsey's exposition how they think that reasoning skills can be taught. In describing the level of attention to facts and skills they state that '... in this phase of development, knowledge is built through a focus on detail and prototypical examples' (p. 159). Most adherents to practice and expertise models of morality are neo-Aristotelians who are rather critical of the idea that learning how to apply principles should be part of moral education. I think that one cannot discuss prototypical examples without discussing principles. The opposition between principlists and particularists is

overcharged since we neither begin with a given stock of principles nor do we just attend to all the details at hand in a given case (Wijsbek, 2001), but discussing this would carry us beyond the scope of this article.

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NOTES

1. This article is one of two articles in which I examine the consequences of psychological intuitionism for moral philosophy and moral education. The contents of these articles partially overlap.
2. The influence was reciprocal. Kohlberg did also influence John Rawls' views on moral development and the moral personality. See Rawls, 1999, ch. VIII, § 69, note 6 and 8.
3. Psychological intuitionism must be distinguished from moral intuitionism. Psychological intuitionism is a descriptive theory about the formation of moral judgements; moral intuitionism is a normative, epistemic theory that specifies how moral beliefs are justified.
4. I discuss (the critique on) Haidt's view in Musschenga, 2008a.
5. The implications of psychological intuitionism for moral education in general are discussed in Lapsey and Hill, 2008.
6. Huemer's view, statements of the form 'it seems to S that p' describe a kind of propositional attitude, different from belief, of which sensory experience, apparent memory, intuition, and introspective awareness are species. He calls this type of mental state an 'appearance'. It is by virtue of having an appearance with a certain content that one has justification for believing that content (Huemer, 2005, p. 30).
7. This is the description of the classic trolley problem:

   A trolley is hurtling down the tracks. There are five innocent people on the track ahead of the trolley, and they will be killed if the trolley continues going straight ahead. There is a spur of track leading off to the side. There is one innocent person on that spur. The brakes of the trolley have failed and there is a switch that can be activated to cause the trolley to go to the side track. You are an innocent bystander (that is, not an employee of the railroad, etc.). You can throw the switch to save five innocent people, which will result in the death of the one innocent person on the side track. What would you do?

   And this is the footbridge variant:

   A trolley threatens to kill five people. You are standing next to a large stranger on a footbridge spanning the tracks, in between the oncoming trolley and the hapless five. The only way to save them is to push the stranger over the bridge onto the tracks below. He will die if you do this, but his body will stop the trolley from reaching the others. Should you save the five others by pushing the stranger to his death? Contrary to the response to the trolley problem, most people say no.

8. Dreyfus and Dreyfus use the terms *maxims and aspects* to differentiate this form of instruction from the one in the first stage, where strict *rules* were given as to how to respond to context-free *features*. Since maxims are phrased in terms of aspects they already presuppose experience in the skill domain (p. 233).
9. See Musschenga, 2008a.

REFERENCES

Audi, R. (2004) *The Good in the Right* (Princeton, NJ, Princeton University Press).

Bargh, J. A. (1999) Automaticity in Social Psychology, in: E. T. Higgins and A. W. Krugalski (eds) *Social Psychology: Handbook of Basic Principles* (New York, Guilford), pp. 169–83.

Bargh, J. A. and Chartrand, T. L. (1999) The Unbearable Automaticity of Being, *American Psychologist*, 54, pp. 462–479.

Baron, J. (1994) Nonconsequentialist Decisions, *Behavioral and Brain Sciences*, 17, pp. 1–42.

Blasi, A. (1980) Bridging Moral Cognition and Moral Action: A Critical Review of the Literature, *Psychological Bulletin*, 88, pp. 1–45.

Dreyfus, H. L. and Dreyfus, S. E. (1986) *Mind over Machine: The Power of Human Intuitive Expertise in the Era of the Computer* (New York, Free Press).

Dreyfus, H. L. and Dreyfus, S. E. (1991) Towards a Phenomenology of Ethical Expertise, *Human Studies*, 14, pp. 229–50.

Dijksterhuis, A., Bos, M. W., Nordgren, L. F. and van Baaren, R. B. (2006) On Making the Right Choice: The Deliberation-without-attention Effect, *Science*, 311, pp. 1005–7.

Einhorn, H. J. and Hogarth, R. M. (1978) Confidence in Judgment: Persistence of the Illusion of Validity, *Psychological Review*, 85, pp. 395–416.

Gilligan, C. (1982) *In a Different Voice: Psychological Theory and Women's Development* (Cambridge, MA, Harvard University Press).

Greene, F. D., Sommerville, Nystrom, R. B., Darley, J. M. and Cohen, J. D. (2001) A fMRI Investigation of Emotional Engagement in Moral Judgment, *Science*, 293, pp. 2105–8.

Greene, F. D., Sommerville, Nystrom, R. B., Darley, J. M. and Cohen, J. D. (2004) The Neural Bases of Cognitive Conflict and Control in Moral Judgment, *Neuron*, 44, pp. 389–400.

Guthrie, C., Wistrich, A. J. and Rachlinski, J. J. Judicial Intuition. Manuscript, retrieved on November, 12, 2007 from: law.vanderbilt.edu/academics/scholarly-events/past-events/law-and-the-emotions/program/download.aspx?id=2151

Haidt, J. (2001) The Emotional Dog and its Rational Tail: A Social Intuitionist Approach to Moral Judgement, *Psychological Review*, 108, pp. 814–34.

Haidt, J. (2007) The New Synthesis in Moral Psychology, *Science*, 316, pp. 998–1002.

Haidt, J. and Bjorklund, F. (2008) Social Intuitionists Answer Six Questions About Moral Psychology, in: W. Sinnott-Armstrong (ed.) *Moral Psychology, Vol. 2. The Cognitive Science of Morality: Intuition and Diversity* (Cambridge, MA, MIT Press), pp. 181–219.

Hartogh, G. A. den (1999) General and Particular Considerations in Ethics, in: A. W. Musschenga and W. J. van der Steen (eds) *Reasoning in Ethics and Law: The Role of Theory, Principles and Facts* (Avebury, Ashgate), pp. 19–49.

Hoffman, M. L. (2000) *Empathy and Moral Development: Implications for Caring and Justice* (Cambridge, Cambridge University Press).

Hogarth, R. (2001) *Educating Intuition* (Chicago and London, University of Chicago Press).

Hogarth, R. (2002) Deciding Analytically or Trusting Your Intuition? The Advantages and Disadvantages of Analytic and Intuitive Thought, *UPF Economics and Business Working Paper*, No. 654. Available at SSRN: http://ssrn.com/abstract=394920 or DOI: 10.2139/ssrn.394920

Huemer, M. (2005) *Ethical Intuitionism* (New York, Palgrave Macmillan).

Huemer, M. (2008) Revisionary Intuitionism, *Social Philosophy and Policy*, 25, pp. 368–92.

Lapsey, D. K. and Hill, P. L. (2008) On Dual Processing and Heuristic Approaches to Moral Cognition, *Journal of Moral Education*, 37, pp. 313–33.

Musschenga, A. W. (2008a) Moral Judgement and Moral Reasoning, in: M. Düwell, C. Rehmann-Sutter and D. Mieth (eds) *The Contingent Nature of Life: Bioethics and the Limits of Human Existence* (Dordrecht, Springer Verlag), pp. 131–41.

Musschenga, A. W. (2008b) The Epistemic Value of Intuitive Moral Judgements, unpublished paper.

Narvaez, D., Bock, T. and Endicott, L. (2003) Who Should I Become? Citizenship, Goodness, Human Flourishing, and Ethical Expertise, in: W. Veugelers and F. K. Oser (eds) *Teaching in Moral and Democratic Education* (Bern, Peter Lang Publishers), pp. 43–63.

Narvaez, D. and Lapsey, D. K. (2005) The Psychological Foundations of Everyday Morality and Moral Expertise, in: D. Lapsey and D. Power (eds) *Character Psychology and Character Education* (Notre Dame, IN, University of Notre Dame Press), pp. 140–65.

Petrinovich, L. and O'Neill, P. (1996) Influence of Wording And Framing Effects on Moral Intuitions, *Ethology and Sociobiology*, 17, pp. 145–71.

Pizarro, D. A. and Bloom, P. (2001) The Intelligence of the Moral Intuitions: A Comment on Haidt, *Psychological Review*, 110, pp. 193–96.

Rawls, J. (1999) *A Theory of Justice*, 2nd revd. edn. (Oxford, Oxford University).

Rest, J. (1983) Morality, in: J. Flavell and E. Markman (eds) *Cognitive Development. Manual of Child Psychology*, 4th edn., vol. 3, P. Mussen ed. (New York, John Wiley and Sons), pp. 556–629.

Saltzstein, H. D. and Kasachkoff, T. (2004) Haidt's Moral Intuitionist Theory: A Psychological and Philosophical Critique, *Review of General Psychology*, 8, pp. 273–82.

Selinger, E. M. and Crease, R. P. (2002) Dreyfus on Expertise: The Limits of Phenomenological Analysis, *Continental Philosophy Review*, 35, pp. 245–79.

Sinnott-Armstrong, W. (2006) Moral Intuitionism Meets Empirical Psychology, in: T. Horgan and M. Timmons (eds) *Metaethics after Moore* (Oxford, Clarendon Press), pp. 339–65.

Sinnott-Armstrong, W. (2008) Framing Moral Intuitions, in: W. Sinnott-Armstrong, *Moral Psychology, Vol. 3. The Cognitive Science o Morality: Intuition and Diversity* (Cambridge, MA, MIT Press), pp. 47–77.

Sloman, S. A. (1996) The Empirical Case for Two Systems of Reasoning, *Psychological Bulletin*, 119, pp. 3–22.

Stanovich, K. E. and West, R. F. (2000) Individual Differences in Reasoning: Implications for the Rationality Debate?, *Behavioral and Brain Sciences*, 23, pp. 645–65.

Sunstein, C. R. (2005) Moral Heuristics, *Behavioral and Brain Sciences*, 28, pp. 531–42.

Tversky, A. and Kahneman, D. (1981) The Framing of Decisions and the Psychology of Choice, *Science*, 211, pp. 453–58.

Unger, P. (1996) *Living High and Letting Die* (Oxford and New York, Oxford University Press).

Wheatley, T. and Haidt, J. (2005) Hypnotic Suggestion Makes Moral Judgments More Severe, *Psychological Science*, 16, pp. 780–84.

Wijsbek, H. (2001) *Taking Lives Seriously: Philosophical Issues in the Dutch Euthanasia Debate*. Vrije Universiteit Amsterdam, unpublished doctoral dissertation.

Wilson, T. D. (2002) *Strangers to Ourselves: Discovering the Adaptive Unconscious* (Cambridge, MA, Harvard University Press).

Wilson, T. D. and Brekke, N. (1994) Mental Contamination and Mental Correction: Unwanted Influences on Judgments and Evaluations, *Psychological Bulletin*, 116, pp. 117–42.

Woodward, J. and Allman, J. (2007) Moral Intuition: Its Neural Substrates and Normative Significance, *Journal of Physiology–Paris*, 101, pp. 179–202.

Wright, J. (2006) *The Role of Reason and Intuition in Moral Judgment: A Review*. Submitted to the Department of Psychology, University of Wyoming in partial fulfillment of the Comprehensive Exam, retrieved on August 17, 2007 from http://uwstudentfpweb.uwyo.edu/n/narvik/psychology/psychology_page.htm