



# **Moral Education and Development**



# MORAL EDUCATION AND DEVELOPMENT

*A Lifetime Commitment*

**Edited by**

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*Doret de Ruyter and Siebren Miedema*  
*June 2011*



DORET J. DE RUYTER AND SIEBREN MIEDEMA

## INTRODUCTION: A COMMITMENT TO CLARITY IN PHILOSOPHY OF MORAL EDUCATION

When we decided to invite colleagues to contribute to a *liber amicorum* to celebrate the academic career and profound works of Jan Steutel at the time of his retirement, we did not have to search for the topic of the book. In the past thirty years, Jan Steutel has dedicated most of his academic efforts to moral education. Not only his research, but also most of his teaching at VU University Amsterdam and later also at the University of Amsterdam has been concerned with philosophical questions about moral education.

In his research on moral education, three topics have been particularly prevalent, namely virtue ethics, civic education and sex education. We only give a very concise description of the main characteristics and qualities of Jan Steutel's contributions to these fields, because this book includes a selection of three of his articles covering these topics as exemplary specimens of his work. These illustrate his views and the excellence of his philosophical writings. His publications are not only very precise and sometimes even highly meticulous, but also lucid because every argument he makes is explained and justified. Clarity has become a work of art.

As an analytic philosopher of education, Steutel has focused on the meaning of concepts that are central to moral education. However, while clarification of the meaning of concepts has never ceased to be an important part of his work, normative-ethical questions in relation to (moral) education also became a significant theme of his work.

When Steutel began to work on moral education, after ten years of academic research on the theory and methodology of conceptual analysis as such (for instance Steutel 1982, 1988, 1991), he was interested in explicating the meaning, role and position of virtues and virtuousness in education. In a book *Morele Opvoeding [Moral Education]*, which he edited in 1984, the focus of his analysis was on virtuousness as an aim of education. He does not, at least not explicitly, defend this aim of moral education, but explains what virtue and virtuousness mean and which responsibilities of the moral educator follow from these analyses. It is both typical and remarkable for his contributions in the 1980's that Steutel does not intend to justify virtuousness as an aim of moral education, but that he explicates different meanings of virtuousness and the virtuous person. Equally, the description of the tasks of the educator are presented as an elucidation of the aspects of an education towards virtuousness if a moral educator were to believe that virtuousness is the appropriate aim of moral education. In 1992 he wrote a Dutch book with the title *Deugden en morele opvoeding [Virtues and moral education]*. In this book we

again find a thorough analysis of virtue and virtuousness, but Steutel also relates his philosophical analysis to the results of empirical research. Moreover, he also defends a theory of virtuousness as the most plausible theory of moral behaviour and moral education. He argues that a virtue ethical approach can be regarded as an umbrella for other perspectives on moral education – the value clarification, value transmission and cognitive developmental approaches. He believes that internalised moral norms (the aim of value transmission) are components of moral virtues and that the capacity to reason at a post conventional level (Kohlberg) can be perceived as a central aspect of what may be called the virtue of duty. ‘In this sense, virtue ethics is not a particular perspective that has to be complemented with the other approaches, but it is in fact the Alfa and Omega of moral education’ (1992, p. 10, transl. by DJR & SM).

In contrast to what many might think, it should be noted that Steutel has never committed himself to a strict virtue-ethical position. In his book he elucidates virtues as follows. Virtues are: 1) a kind of dispositions: intrinsic desires and aversions that are relatively stable and permanent (and that have a minimum level of intensity); and 2) a kind of capacity: empathic capacity and judicial capacity. Furthermore, he distinguishes four types of virtues, namely teleological virtues, like compassion, generosity, care; non-teleological virtues such as justice, honesty, loyalty; volitional virtues, like courage, integrity, determination, and the virtue of duty. It is particularly the last type of virtue that distinguishes him from what he calls the radical virtue ethicists. In the article ‘The virtue approach to moral education’ that was published in the *Journal of Philosophy of Education* in 1997, Steutel explains that his theory of virtues is not a virtue approach for two reasons. Firstly, it is argued that a virtue approach takes aretaic concepts and judgements as basic or fundamental (it is an aretaic ethics: 1997, p. 403) while his own theory of virtues is based on principles. Secondly, virtue ethics explains moral action in terms of moral character (it is an aretaic *agent* ethics: 1997, p. 403), while for Steutel the aims of moral education are founded in an ethics of principle, for which he, moreover, provides a utilitarian justification.

In his work on civic education, Steutel explicitly defends a political liberal ethical position. The fact that we are living in a liberal democracy is not merely assumed as a given from which questions around civic education have to be addressed, the principles and values of a liberal democracy are believed to be the best for a society in which people with diverse conceptions of the good life have to cohabit. It should be noted that not the diversity or pluralism itself is of prime importance from a political liberal ethical perspective but the valuing of equal freedom or liberty. In the chapter Steutel wrote together with Spiecker on civic education that is included in this book – theirs was a very fruitful and productive cooperation – his justification for this position is given.

In his work on sexual ethics and sex education, which has covered many different subjects (among others sexual ethics for adolescents (Steutel, 2009a, 2009b), incest (Steutel & Spiecker, 2000a, 2006a), paedophilia (Spiecker & Steutel, 2000; Steutel & Spiecker, 2000a), people with disabilities (Spiecker & Steutel, 1997, 2002; Steutel & Spiecker, 2002, 2006b), liberal ethics forms the starting point.

Liberal ethics encompasses the values to allow people to live a sexual life as they want to. This is not an unlimited liberty; the articles referred to (also) clearly set out to defend the moral boundaries of this freedom. Moreover, in the chapter on sexual ethics for adolescence we can read that Steutel discovers a rather illiberal implication of liberal sexual ethics for adolescence that inspires him to develop and defend an alternative moral principle for evaluating sexual contacts of adolescents.

Together with the choice of the topic, we also decided that the book had to be written for a wide academic audience including bachelor students. In this way the other side of Steutel's work, teaching bachelor and master students, will be continued in a certain sense as well: the most important reading for the bachelor course in Moral Education at VU University Amsterdam will be this book. This was another reason for including chapters of Jan Steutel, who is, unjustifiably, reluctant to put his own work on the reading list for students. Thus, the contributing authors have borne in mind that their chapters should be pitched at a level accessible to bachelor students. This does not mean that this is an introductory book into moral education for students only. The collection of chapters covers a diversity of topics which makes it interesting to both newcomers and experts in the field.

### *Content of the Book*

Many questions can be raised with regard to moral education and philosophers, psychologists and pedagogues or educationalists have contributed to an extensive body of knowledge. The questions what moral education should comprise and how adults can assist children and youngsters in their moral development are obviously informed by its aim: what it means to be moral or a moral person.

Morality can be distinguished into two concepts. In the normative or evaluative concept of morality, being moral is contrasted with being immoral. There are different ways in which this concept can be used, but when authors defend a particular moral view as being the appropriate aim of moral education, they use a normative concept. This aim could for instance be that persons respect the dignity of other persons, that they care about other persons (and or animals and the environment), that they do not harm the interests of others or that they serve the interests of others well, or that they are persons of good character. In the descriptive concept, morality is contrasted with non-morality. One can for instance raise the question what is characteristic for moral behaviour in comparison to social or religious behaviour or what distinguishes moral judgement or reasons from economic or aesthetic judgements. Or one gives a description of a certain type of morality, for instance an Islamic morality, an Inuit morality or a liberal morality. In this volume the second concept of morality is prominent. Authors describe aspects they believe to be characteristic for being moral, for instance the cognitive qualities of persons (their rationality and ability to reason well), the emotional or sentimental capacities of persons, or the will of people to act morally. However, by doing so they also (implicitly) defend a normative morality. Steutel has explained this in an internal note that was discussed in the department in 1998. He writes: 'Normally moral

philosophers present their own inquiry into the concept of morality in the same way: analysing this concept (...) is regarded as elucidating the criteria for the descriptive use of the term 'moral'. However, it is important to notice that these criteria are in some way *parasitic* on the criteria that govern the normative use of 'moral'. To put it more boldly: without the normative meaning of 'moral' there would be no descriptive meaning of 'moral'. (...) To put it differently, precisely the fact that the criteria for using the word 'morally' in the normative sense are fulfilled, functions as the criterion for describing or classifying the judgement as a moral one, that is, for using the word 'moral' in the descriptive sense' (Steutel, 1998, p.2)

**The first part** of the book contains two chapters that provide us with empirical insights into why people act morally. This empirical knowledge is obviously important for moral educators. While empirical data cannot prescribe what moral educators should do, they have to be aware of empirical data concerning (moral) development in order to be able to provide a moral education that actually furthers the moral development of children.

*Marinus van IJzendoorn and Marian Bakermans-Kranenburg* present an empirical research in which they studied a specific type of prosocial behaviour, namely donating money to a charity. The aim of their study was to investigate the (relative) influence of genetic and dispositional factors, (shared and unique) environmental factors and situational characteristics on the moral behaviour of persons. Interestingly, their research shows that moral behaviour is influenced or triggered primarily by the situation in which people are placed. Situations can make people behave immorally and they can increase the moral behaviour of people who would otherwise be more reluctant to do so. Given the importance of situations for moral behaviour, Van IJzendoorn and Bakermans-Kranenburg suggest that educators have to ensure that the environment in which children develop is laden with high moral standards.

*Darcia Narvaez* explains on the basis of an extensive literature review the importance and impact of the brain or neurological processes for moral behaviour. She describes how the development of the brain from conception onwards is affected by the influence of care-takers and educators. Their influence can stimulate but also stultify children's moral development. For instance, she shows that early influence on the brain may be beneficial or adversarial to development of three ethics: security ethic, engagement ethic and imagination ethics. Later, when children go to school this environment has an important role to play. Narvaez has developed an Integrative Ethical Education model that describes how the school can sustain the engagement and situation ethics, while at the same time can prevent that the security ethic that is focused on survival and self-protection does not become dominant.

The third chapter of part 1 of *Kristján Kristjánsson* forms the bridge to the second, primarily philosophical part. He critically evaluates the role of moral psychologists to the theory building of moral education, more particular the virtue ethical approach of moral education. He explores the idea that virtue ethicists,

psychologists and moral educators interested in the cultivation of character should pool their resources. He argues that the reason why the desired cooperation has not yet come about lies primarily in psychology's failure to deliver the required empirical evidence about the ingredients of a morally good life. He believes that psychologists have failed to do so, because of a fear of normativity. He does, however, offer alternatives to the psychologists that may assist them in moving beyond this impasse.

**The second part** of the book focuses on what it means to be a moral person and particularly on the question which capacities, dispositions or abilities have to be developed in order to be able to say that someone is a moral person. In the literature on moral education and morality in general, we find four aspects of the moral person: rationality (thinking or cognition), emotions (sentiments), volition (the will) and action or behaviour. The debate focuses on whether or not these aspects are all necessary for being able to say that someone is a moral person and if there might be a certain order of importance of rationality, emotions or volition for moral behaviour. Harvey Siegel's chapter offers a helpful concise overview of the positions defended, while most chapters make reference to such theories. For instance, Kohlberg's cognitive developmental theory, which stipulates that moral judgement is the most important factor in moral behaviour and Aristotle's virtue ethics in which rationality and emotions are argued to be in balance (see Carr) are mentioned and briefly explored by almost all authors.

The contributions of *Harvey Siegel* and *Bert Musschenga* provide arguments for the importance of rationality for moral behaviour.

Siegel makes a case for the role of reasons in moral education. Having identified six possible aspects or dimensions that moral educators may want to influence, namely action, beliefs, thinking/reasoning, habits, virtues/character and or sentiments, Siegel continues to identify the way in which reasons play a role in (the education of) these aspects. He shows that reasons can but do not necessarily play a role in the aspects – obviously with the exception of thinking/reasoning – and therefore reasons can but do not necessarily play a role in moral education. However, he offers four considerations for claiming that reasons have a necessary and even a substantial role. The one with the most weight seems to be that reasons must play a role, because we have an obligation to treating children and students with respect as persons.

Musschenga describes the relevance of conscious moral reasoning for moral behaviour. While intuitions are important, there are situations in which they fall short, for instance when dealing with unfamiliar problems. Moreover, empirical psychological research shows there are influences on a person's moral intuitions that are not relevant to morality and actually lead to biases while one is not aware of this effect. Musschenga provides several suggestions for educators on how to assist students to become aware of these biasing effects with which students can diminish their influence.

The chapters of *David Carr* and *Jan Steutel and Ben Spiecker* address the education of the emotions that play a role in moral behaviour. We should

emphasize that these authors do not give primacy to the role of emotions for moral behaviour nor to the development and education of emotions for becoming a moral person.

Carr suggests that both reason and feeling are important and thus sets out to explicate the theory he believes promises to provide the best ethical balance, namely virtue ethics. Carr focuses on the importance of emotions within the framework of virtue ethics, but immediately explains that for Aristotle emotions are not non-rational, in other words that emotions have a cognitive component. Emotional education is to be situated in the cultivation of practical wisdom, which is the mode of deliberation concerned with understanding one's feelings, motives and actions. An important source for cultivating practical wisdom is the narrative. Through narratives (stories and poems) students learn about moral character; it provides them with the opportunity of experiential reflection of practical wisdom. Thus, art education can have an important contribution to moral development.

Stutel and Spiecker explore how and why habituation may be an effective way of cultivating the sentimental dispositions that are constitutive of the moral virtues. We have deleted the abstract they provided for the *Journal of Philosophy of Education*, but copy and rephrase the most important sentences here. They clarify habituation as involving (i) acting as virtue requires, (ii) both frequently and consistently, and (iii) under the supervision of a virtuous tutor. If the focus is on the first two characteristics, habituation seems to be a proper method for acquiring skills or inculcating habits, rather than an effective way of cultivating virtuous sentimental dispositions. They argue, however, that in this case habituation may be an efficacious means of moderating, reducing or restricting the child's affective dispositions where these are somehow excessive. In contrast, if the child's sentimental dispositions are somehow deficient, the third aspect is required.

A third chapter with regard to emotional, but also cognitive, aspects is the contribution of *Bruce Maxwell and Roxanne Desforges*. They present a critical investigation of internet sites that provide information about empathy, empathizing and empathic development for educators. They have selected six websites and analysed the definition of empathy, the process of empathizing, the reasons provided for why educators should be concerned with empathic development, and the way in which skills of empathizing can be taught and exercised. They conclude that the websites predominantly use a cognitive conception of empathy and fail to clearly distinguish this conception from affective empathy – the websites actually conflate the two – which means that suggestions for educators on how to teach empathy should be critically assessed.

The final two chapters of part 2 also deal with what it means to be a moral person, but address this question with different concepts. *Anders Schinkel* investigates what it means to say that a person has a conscience and how the education of children into persons of conscience may take shape and *Stefaan Cuypers* raises the question what education for morally responsible agency involves. Schinkel's chapter addresses a concept that has been out of fashion for a long time, being associated with petty-bourgeois mentality. However, conscience is receiving increasingly positive attention. As may be expected, there are different meanings of

‘conscience’. Schinkel defends an interpretation of ‘conscience’ as being a mode of consciousness and defines it as ‘concerned awareness of the moral quality of our own contribution to the world’. In this interpretation, the person of conscience has emotional and cognitive qualities that should both be addressed in moral education.

Cuyper’s answer to the question what education for morally responsible agency involves is given against an analysis of what he believes to be two necessary conditions for moral responsibility: the agency condition and the moral knowledge condition. Cuyper first specifies the content of the necessary agential and moral profile that children should acquire during their moral education. He then looks in detail at the way in which youngsters can possibly acquire – and, as a counterpart, how parents can possibly instil – such a profile during the process of moral upbringing. The guiding idea of his analysis is that acquiring this agential and moral profile through moral education is required to be able to fulfil the two selected necessary conditions of moral responsibility later in life. For the elaboration of this idea he draws, among other things, on recent work about concept formation and moral competence.

Moral education is not necessarily taught as a separate topic in schools, although it is possible to have lessons in character education, but can be part of other curricular subjects as well. It is also true that the moral development of students is not only furthered in lessons, the ethos of the school as well as rules and regulations in the school with regard to the way in which students have to interact all have an influence on the moral development of students. Likewise, while parents may quite explicitly be morally educating their children, for instance when they discipline their child for hitting their sibling, the rules of the family as well as the climate of the family and the way in which parents act themselves, influence the moral development of their children. **The third part** of the book contains five chapters that deal with moral aspects of sex education and civic education.

*Sharon Lamb and Aleksandra Plocha* develop an ethics-based sex education that is based on care and personal rights. They draw particular attention to the care that should be given to and concern for students who are vulnerable sexually. In exploring the way in which lesbian, gay, bisexual, transgender and queer (LGBTQ) students, students with developmental disabilities and students who have experienced rape or sexual abuse, are vulnerable and how their vulnerabilities may be met in sex education, Lamb and Plocha in the end provide the outlines of a comprehensive ethics-based sex education that is not only beneficial to the vulnerable students, but might be of benefit to all students.

The chapter of *Jan Steutel* that we have included is strictly spoken not a chapter on moral sex education, but about sexual ethics. However, we wanted to include this in this book, because it is an abbreviated version of his inaugural lecture with which he accepted his special chair in philosophy of education at the University of Amsterdam in 2007. Moreover, the ethical position he defends also gives insight into his views on what the content of the moral sex education should be; in fact he offers three guidelines for parental interaction with adolescents that are an important way of promoting the growth of adolescents into competent actors in the field of sexual relations. As already mentioned, Steutel refutes an illiberal implication of a

liberal sexual ethics for adolescence. According to a liberal sexual ethics, sexual contacts in which adolescents are involved are morally impermissible. The core principle of the liberal ethical view, the principle of valid consent, takes competence as a necessary condition of morally permissible sex. Because adolescents are not yet sufficiently capable of judging and acting prudently in the sexual sphere of life, their consent to sexual relations cannot meet the criterion of competence. This implication Steutel rejects. Steutel defends an alternative moral principle for evaluating sexual contacts of adolescents. He argues that adolescents are still placed under parental authority, precisely because they are not yet sufficiently capable of looking after their own interests. What is thus required for making sexual contacts permissible is the considerate consent of their parents.

The chapter of *Jan Steutel and Ben Spiecker* is a translation of a Dutch chapter that appeared in 2007, which again was a translation and revision of an English chapter that appeared in 2000 (Steutel & Spiecker, 2000b). In this chapter, Steutel and Spiecker explain that the state is involved in civic education in two ways: civic education is education by and for the state. It is the education that the state requires schools to teach and that aims for citizenship. The typical virtues that civic education should aim for are those that correspond with the principle of greatest equal liberty (Rawls). Steutel and Spiecker then make a distinction between two types of virtues, namely moral virtues that are incorporated by the cardinal virtue of justice and intellectual virtues that are unified by the cardinal virtue of concern and respect for truth. In discussion with Tamir and Gutmann, they elucidate their conception of these two types of civic virtues and their justification of these virtues as aims of civic education.

In the second part of her chapter *Wilna Meijer* discusses the political liberal view on civic education of Steutel and Spiecker as outlined in the former chapter. It is her contention, referring to Terence McLaughlin's concept of a maximal interpretation of citizenship education, that the classical concept of liberal education (Peters, O'Hear) provides as such the citizenship education for a liberal democracy. This classical concept focuses on general liberal education while aiming at breadth of knowledge and understanding and at the cultivation of intellectual virtues (virtues that are of great importance for Steutel and Spiecker as well). In Meijer's view Steutel and Spiecker's conception of civic education is unnecessarily too restricted. In the first part of the chapter she explores Robert Jackson's views with regard to the maximal interpretation of citizenship education in relation to religious education in a plea for 'learning about religions' in the school setting across Europe.

*Michael Merry* explicates the notion of civic competence related to the right to vote of older children. His focus is on the competences relevant to exercise citizenship, especially the competences within the reach of older children, that is adolescents between fourteen and seventeen. He outlines the competences that most older children already have or are able to acquire provided the right kind of background conditions are in place so that they can demonstrate the competences relevant for understanding the major issues on which most persons base their political decisions and which make it possible to participate meaningful in the

political process. His plea is for lowering the voting age by three years to fifteen. Merry is aware of the fact that the act of voting is just one aspect of civic participation. However, on the basis of his observation that older children under eighteen already take part in other forms of political activity, but are flatly denied the privilege of voting, he believes that a defence of the right to vote is of eminent importance and should be dealt with as a distinct topic.

The book ends with **part four** consisting of a chapter about the moral education of students who will work in a pedagogical or educational environment. *Jos Kole* explores the pros and cons of using the concept of competences in the moral formation of pre-professionals. Competences currently seem to be the predominant way of conceptualising the qualities of professionals and thereby also of defining the aims of education of students. Does this mean that moral qualities and aims of moral education should also be phrased in terms of (moral) competences? He shows that the arguments that defend the use of moral competences – the curriculum integration argument and the personal component integration argument – correspond with a wide and singular conception of a person’s (moral) competence. In contrast, the arguments that oppose to the idea of moral competences – the dwindling effect and the disintegration effect – correspond with a narrow view of competences. This insight also allows him to critically and normatively evaluate these four arguments.

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# **PART 1**



MARINUS H. VAN IJZENDOORN AND MARIAN J. BAKERMANS-  
KRANENBURG<sup>1</sup>

**ON EMBODIED AND SITUATIONAL MORALITY:  
NEUROBIOLOGICAL, PARENTAL  
AND SITUATIONAL DETERMINANTS OF ALTRUISM  
AND DONATING TO CHARITY**

GOOD, BAD, AND UGLY

Most parents like to believe that infants and young children are innocent human beings, and that morality develops in a cumulative fashion so that with increasing age children would act more empathically and pro-socially. In the science of morality we have for a long time been attached to the idea that individuals steadily progress through a series of stages toward an ever more sophisticated moral stance, and that stable differences exist in the degree to which individuals commit themselves to empathic or prosocial acts (Kohlberg, 1984; Piaget, 1932).

It requires a major acrobatic feat, however, to combine this optimistic model of morality with the indifferent, immoral and antisocial behaviour that most adults seem capable of when the situation triggers or even only leaves room for such behaviour. From Auschwitz (Sagi-Schwartz et al., 2003) to Abu Ghraib (Zimbardo, 2007) recent history is filled with disturbing examples of the banality of evil (Arendt, 1963/2006). But history also shows almost universal empathic concern with victims of man-made or natural disasters, such as the 2004 Indian Ocean earthquake or tsunami, stimulating millions of people around the globe to donate an estimated 7 billion dollars for repairs and help for the survivors. Situational canalisation (to use the famous concept of the biologist C.H. Waddington, 1942) of moral behaviour might also create 'the banality of altruism'.

A moral 'character' or set of dispositions that would lead to predictable moral choices in all or most moral dilemmas seems an irrelevant or even refutable assumption derived from an Aristotelian tradition (Aristotle, *Nicomachean Ethics*) that not managed to incorporate the lessons to be learned from the cruelest of all centuries. Many advances in the social psychology of human behaviour also seem to undermine the Aristotelian idea of moral character (Doris et al., 2010). Nevertheless, human beings might come into this world endowed with some of the most important Aristotelian character traits such as empathy for the suffering of others and indignation about injustice done to others when character is defined as disposition instead of action tendency.

### *Noble Newborns*

Human infants seem to be endowed with an inborn capacity to be empathic to distress, and to favour morally good individuals over morally bad persons. The empathic baby is an appealing idea. In a pioneering study on empathic distress, Sagi and Hoffman (1976) exposed 58 one-day-old infants to a newborn cry, a synthetic cry, or silence. Infants exposed to a real cry cried significantly more often than those exposed to a synthetic cry of the same intensity, or to silence. Although mimicry may be a viable alternative explanation, the authors suggest that this selective cry response in newborns may provide some evidence for an inborn empathic distress reaction.

In a groundbreaking study Hamlin, Wynn, and Bloom (2007) showed that 6- and 10-month-old infants are already able to evaluate an individual on basis of their hostile or helpful actions in computer-animated events. Astonishingly, most preverbal infants prefer an individual who helps another to one who hinders another, prefer a helping individual to a neutral individual, and prefer a neutral individual to a hindering individual – even if that ‘individual’ is not more than a geometric figure in a computer animation. The authors argue that the capacity of very young children to derive moral evaluations from simple actions may serve as the foundation for moral thought and action, and they suggest that its early emergence supports the view that morality is inborn.

## EMBODIED MORALITY

### *Generous Genes?*

Altruism and prosocial behaviour have been speculated to be evolutionary-based universal competences of human beings and of a large variety of avian and mammalian species as well. From these competences the actual altruistic performance might follow, as well as individual and situational differences in altruistic behaviour. Evolutionary roots of altruism and prosocial behaviour have been discussed ever since Darwin’s observation (1871/1982) that human beings might have become unusually prosocial because in-group solidarity created elevated chances of survival in deadly struggles with out-groups and predators (see also Krebs, 2008). Conflict would be ‘altruism’s midwife’ and ‘parochial altruism’ the rule (Bowles, 2008). On the level of individual organisms and genes, the inclusive fitness theory (Hamilton, 1964a, 1964b) also explains altruistic behaviour to relatives if it facilitates the reproduction of one’s (shared) genes into the next generations. For example, inclusive fitness nicely explains parental altruism (though not unlimited) to offspring (Trivers, 1974).

De Waal (2008) argued that the basic ability for empathic concern may have developed in the context of parental care long before the human species evolved. He refers to the evolutionary-based attachment behaviour of offspring (see Van IJzendoorn et al., 2009, for infant chimpanzees’ human-like attachments), and the probability that avian or mammalian parents who were sensitive to their offspring’s needs likely out-reproduced those who remained indifferent. Hrdy (2009) extended

the attachment model and proposed a new hypothesis, based on ‘cooperative breeding’. She notes that it takes around 13 million calories to rear a human from birth to nutritional independence. This is far more than a foraging mother could provide on her own, and help from her mate and group members other than the parents, so-called alloparents, appeared essential. Cooperative breeding was necessary for survival in an environment with high parent and child mortality, and selection would favour those individuals best equipped to monitor the mental states of others and to contribute to cooperative breeding. Prosocial behaviour, empathic concern, and sharing of scarce resources would be rooted in the basic need for cooperative child rearing.

### *Twin Studies*

Even if we assume an evolutionary basis for altruism and empathic concern, the question remains whether individual differences in actual moral performance are associated with differences in genetic make-up, or with specific dispositional or personality characteristics. To address the role of genetic factors in the explanation of individual differences in altruistic and prosocial behaviour studies with monozygotic and dizygotic twins have been conducted (e.g., Zahn-Waxler et al., 1992). Simply put, if correlations of moral behaviour for monozygotic twins (100% genetically similar) are substantially higher than the correlations for dizygotic twins (on average 50% genetically similar) there is some evidence for a genetic basis. One of the first twin studies on altruism included 573 adult twin pairs who were asked to complete the Self-Report Altruism Scale requiring respondents to report the frequency with which they had engaged in 20 specific moral behaviours such as ‘I have donated blood’ (Rushton et al., 1986). More than 50% of the variance in altruism was found to be genetically based, whereas an almost equal percentage was explained by the unique environment component including measurement error. A tiny 2% appeared to be due to common environmental factors that make individuals within a family similar to each other.

Only two twin studies have been published on children’s prosocial behaviour, in particular empathic helping behaviour and concern for another person’s pain and distress. Volbrecht et al., (2007) observed more than 200 twin pairs in the second year of life reacting to their primary caregiver who pretended to have pinched her finger in a clipboard and feigned pain for a brief period. Helping behaviour and empathic concern to distress did not show any genetic influence, and both shared and unique environment explained the variation in these prosocial behaviours. In the second study, Knafo et al., (2008) observed more than 400 twin pairs longitudinally from 14 to 36 months of age in a similar empathic distress procedure, but also including a stranger simulating pain. At 14 months, no genetic effect was found on a composite measure of empathy, based on mother and experimenter simulations. By 24 months, a genetic effect accounting for about a quarter of the variance emerged and this effect remained stable toward 36 months. With age, genetic effects on prosocial behaviour and empathic concern appeared to increase, and shared environmental effects to decrease.

*Donating to Charity (UNICEF)*

In our own studies the focus was on donating behaviour as an example of altruistic, prosocial behaviour. We have addressed the question what is most important in predicting children's donation of hard-won money to the cause of a well-known charity (UNICEF): genetic differences, differences in disposition (attachment and temperament), or situational differences. We also examined what influence the 'love' hormone oxytocin may have on donating behaviour.

For the purpose of this series of studies we define altruism in a somewhat loose way as the individual's inclination to spend resources without the expectation of personal gain. Donating behaviour is, of course, just one example of moral behaviour and various types of moral behaviour should be observed, in a range of situations. Here we only aimed at testing whether donating is primarily determined by disposition, genes, hormones, or situation. If it turns out to be largely situationally determined it may be considered falsifying evidence (in the Popperian sense) for the dispositional or genetic viewpoint. It would also show that it is problematic to consider moral behaviour as stable across situations since minor changes in settings might canalise behaviour in different directions (see Hartshorne & May, 1928/1932).

One might argue that donating behaviour does not take into account the reasons or motivations to donate money. These reasons might be amoral or even immoral ('I donate to keep children in the developing countries dependent on our aid') and the motivations may be selfish instead of altruistic. That is why most schools of ethics emphasize the intentions of an act or the feelings accompanying the act instead of the act itself, and define morality as acting in line with morally good character traits (Aristotle, *Nicomachean Ethics*) or morally elevated levels of reasoning (Kohlberg, 1984). As Steutel and Spiecker (2004) defined the Aristotelian viewpoint: '...a virtuous person is someone who will have and exhibit particular feelings on the right occasions, for the right reasons, towards the right people, with the right strength and in the right manner. Virtuousness implies having proper feelings...' (p. 532).

However, having the right feelings, the right character traits or correct moral reasons disconnected from actual behaviour is irrelevant for those situations in which moral choices really matter, e.g. helping victims of genocidal regimes to flee or to hide or discontinuing torturous treatment of prisoners even though individuals in command insist on continuation (Zimbardo, 2007). Ethics and theories of moral development should focus on moral behaviour and its prerequisites, not (only or mainly) on morally adequate but abstract reasoning capacities, feelings, or personality traits.

In our studies high-cost donating behaviour without the expectation of any return of the favour was measured by the amount of money (the number of € 0.20 coins) a child donated in response to a videotaped call for donation to UNICEF. After an hour of performing various tasks, the children received 10 coins of € 0.20 for their cooperation, in the absence of their mother. Their reactions showed that this was quite an amount of money for our young participants. They were then left alone and shown a two-minute UNICEF promotional film of a child in a 'resource-limited', developing country. During the last fragments of the promotion the voice-

over asked to donate money; a money box had been positioned next to the video screen. The money box was filled with several coins in order to enhance credibility. After one minute the experimenter came back into the room, and asked in a standardised way if the child would want to donate any money.

In defense of donating as an index for moral behaviour two validation studies might be mentioned. Rushton and Wheelwright (1980) validated an assessment of donating behaviour of 6–10 year olds who in a lab setting were asked to donate tokens to a charity. They found significant associations of donating to a charity with teacher-assessed altruism, and with children's willingness to share scarce resources with their friends. Eisenberg and her colleagues (1987; 1999) found that donating was moderately stable across time, and tended to be positively related to spontaneous sharing of scarce resources with peers as observed in the preschool classroom.

### *Is Donating Heritable?*

We used the donating paradigm in a study of 91 7-year-old same-sex twin children (30 monozygotic, 61 dizygotic; 43 male, 48 female pairs) to examine whether individual differences in donating after being probed by the experimenter are genetically based, or whether at this age the (shared and unique) environment also affects donating behaviour. The percentage of children that donated without being probed was too small to allow genetic modelling.

As apparent from behavioural genetic analysis 45% of the variance in donating was explained by shared environmental influences, e.g. similar parenting styles to both children in the family, and 55% of the variance by unique environment (e.g., uniquely different parental treatment of the twins) and measurement error (see Van IJzendoorn et al., 2010 for statistical details). Our results are in line with Volbrecht et al., (2007) finding of no genetic component in explaining differences in empathic concern. It should be noted that the genetic component in the Knafo et al., (2008) study amounted to only about 25% of explained variance, which might go undetected in our sample because of lack of statistical power. Most importantly, the absence of a main genetic effect is not incompatible with gene by environment interaction effects.

### *Gene by Environment Interaction: Differential Susceptibility Theory*

We turned to molecular genetics to test whether genes might make a difference in children's donating behaviour, depending on their environment and in particular on their experiences with their parents (for a detailed report, see Bakermans-Kranenburg & Van IJzendoorn, 2011). Main effects within subgroups may be hidden in interactions (Bronfenbrenner, 1979; Wachs & Plomin, 1991), as children may be differentially susceptible to their environment (Belsky, Bakermans-Kranenburg & Van IJzendoorn, 2007).

Differential susceptibility theory has emerged as an alternative to traditional cumulative risk or diathesis-stress models of human vulnerabilities (Ellis et al.,

2011). Central to the diathesis-stress model is the postulate that some individuals are at heightened risk for psychiatric or behavioural disturbance when they encounter adversity, whereas others, lacking such (genetic) vulnerability, are not so affected when exposed to the same adversity. Seemingly ‘vulnerable’ individuals may actually be more susceptible to the environment, for-better-*and*-for-worse. Dopamine-related genes (e.g., DRD4) that through their influence on attention and reward mechanisms have been shown to make children more vulnerable to negative parenting turned out to be also susceptibility genes that in supportive family environments promote optimal development (Bakermans-Kranenburg & Van IJzendoorn, 2011).

In our study on donating we expected to find children with a secure attachment to be more willing to donate money to a charity, since they may have experienced more often examples of sensitive empathic concern and thus better moral exemplars from their parents. Children’s attachment representations can be considered mental crystallizations of the degree to which their parents interacted with them in a sensitive way. From ethological, developmental and ethical perspectives parental sensitivity may be seen as one of the first and most salient models of altruistic behaviour and empathic concern in the children’s early lives (Spiecker, 1991), and children’s attachment representations mirror those experiences. In line with the differential susceptibility model, however, the association between attachment and donating behaviour might be moderated by DRD4 genotype. The strongest association between attachment security and donating behaviour might be observed for those children who have the DRD4 7-repeat allele.

We found indeed more donating behaviour in secure children with a specific DRD4 variant. For children without the DRD4 7-repeat allele attachment security did not make a difference for their donations. For the donating behaviour of children with the DRD4 7-repeat allele, however, attachment security was important: Secure children were inclined to donate more money, *and* insecure children showed less donating. This two-sided effect of DRD4 7-repeat, for better *and* for worse, supports the differential susceptibility theory (Bakermans-Kranenburg & Van IJzendoorn, 2006; 2007; Belsky et al., 2007). Both genetic and environmental determinants of prosocial donating behaviour appear important but only when they are considered in interaction (see also Knafo, Israel, and Ebstein, 2011, for a replication of our finding).

A limitation of the current study is the restriction to one laboratory measure of prosocial behaviour, donating to a charity. Bachner-Melman, Gritsenko, Nemanov, Zohar, Dina, and Ebstein (2005) found a main effect of the dopamine receptor gene in that DRD4 was associated with self-reported human altruism, which may suggest that our GxE findings are restricted to *observed* altruism. Furthermore, our study included only 7-year old children, and we should be careful making generalizations to other age cohorts. Grunberg et al., (1985) found that donating to a charity is not linearly related to age. In their study on 3–16 year old children donating reaches a dip around 7 years of age, as children have become more aware of the importance of individual ownership, which might be over-generalized in a way analogous to young children who over-apply rules of grammar.

*Oxytocin a 'Donagenic' Hormone?*

Morality might not only be embodied in genetics but also in hormonal functioning. The first hint in the direction of oxytocin as a potentially important hormone came from a study on the oxytocin receptor gene (OXTR) that we found to be related to sensitive parenting (Bakermans-Kranenburg & Van IJzendoorn, 2008). The neuropeptide oxytocin has been called 'love hormone' and is increasingly used to study the influence of hormonal functioning on feelings, attitudes, behaviour, and neural responses. In particular its positive role in parenting (Naber et al., 2010) and interpersonal trust and empathic concern (Baumgartner et al., 2008) has been documented in experiments using intranasal oxytocin administration (Van IJzendoorn & Bakermans-Kranenburg, in press), and these experiments seem to support the important role of oxytocin in embodied morality.

Nevertheless, oxytocin might not be the panacea to promote love and to suppress aggression for all people in all circumstances (Bartz et al., 2010a,b). In a competitive game that triggered decisions with financial consequences to the subjects themselves, their in-group, and a competing out-group (De Dreu et al., 2010) oxytocin administration appeared to drive a 'tend and defend' response in that it promoted in-group trust and cooperation, but at the same time enhanced defensive aggression toward competing out-groups. In a similar vein, only in the non-ostracism condition of the Cyberball computer game individuals were more desirous to play the social-interactive game again after the oxytocin administration, but not in the ostracism condition where they felt they belonged to the rejected out-group (Alvares et al., 2010). In making pro- or antisocial decisions oxytocin may trigger a biased search for information that is congruent with people's current interpersonal beliefs and expectations of feeling trusted or rejected (Bartz et al., 2010b).

In a donation study on 57 female undergraduate students aged 18–30 years we examined in a double blind experiment whether intranasal administration of oxytocin promoted donating money to UNICEF, and how this related to experienced parental caregiving (Van IJzendoorn et al., in press). Prosocial tendencies may be affected by experienced parental caregiving, in particular by parental sensitive responsiveness (Van IJzendoorn, 1997) and dimensions of parental discipline (Van der Mark, Van IJzendoorn & Bakermans-Kranenburg, 2002). Love withdrawal is a parental disciplinary strategy that involves withholding love and affection when a child misbehaves or fails at a task. By using love withdrawal the parent communicates to the child that his or her love is conditional upon the child's performance. The threat of love withdrawal is a very effective means to force the child to comply with parental wishes. The emotional costs may however be high. Parental use of love withdrawal has been associated with high concern over mistakes, low emotional well-being, and feelings of rejection and resentment towards the parents (e.g., Assor et al., 2004). These feelings may hinder empathic concern for others in distress, and thus lead to lower levels of altruistic behaviour (Koenig, Cicchetti & Rogosch, 2004).

In our experiment oxytocin appeared to increase the participants' donations, but only in the group who experienced low parental love withdrawal. In contrast to this group, individuals with high love withdrawal experiences tended to donate even less in the oxytocin condition. Thus, oxytocin stimulates empathic, prosocial behaviour, but not in every individual or across all contexts. Oxytocin makes some individuals more generous but the donogenic effect seems limited to those who feel accepted by their parents because of who they are instead of what they do.

## SITUATIONAL MORALITY

### *Noble Newborns Revisited*

If the idea of the empathic baby were valid somewhere during the early years this moral capacity must have been pruned quite drastically, or alternatively, kept in check by the social context. Lamb and Zakhireh (1997), for example, documented a remarkable lack of empathic behaviour in 45 toddlers (18 months of age) in the natural setting of a day care centre. These researchers observed 345 distress incidents during 20 hours of video-recording in the (average quality) centres, and registered how children in the group responded to this distress. Only unambiguous instances of prosocial responses to distress were coded, such as offering a toy or patting a crying child, but not simple approaches or concerned looks. Of the 345 incidents a meagre 11 incidents were followed by a prosocial action from one of the peers. Prosocial response (whether or not the child had ever responded prosocially) was not related to age or gender. Of course, this study does not prove that young children would not have the disposition to be empathic; it demonstrates that in the day care setting they display indifferent *behaviour*. The children may have the *competence* to act empathically but their prosocial *performance* does not emerge in the specific situation.

In contrast to a trait-like and cumulative stage-wise interpretation of morality, unselfish or immoral behaviour might better be considered as shaped by the demand-characteristics of the specific situation (Hartshorne & May, 1928/1932; Zimbardo, 2007). Prosocial behaviour may be situation-specific rather than a disposition or personality trait. Exploring the limits of the genetic, dispositional and socialisation views on moral development, we now turn to the influence of situational pressures on moral and immoral behaviour.

### *Situational Immorality*

*Stanford prison experiment.* Moral behaviour may be mainly situation-specific. Several widely known but little digested social-psychological experiments vividly demonstrate this possibility. A powerful example of situational preponderance over dispositional differences was the Zimbardo et al., (2000) Stanford prison experiment in which psychological healthy Stanford students were induced to play the randomly divided roles of prisoners or guards. After a few days the students identified themselves so completely with their roles as torturous guards that the experiment had to be aborted to avoid real casualties.

*Abu Ghraib.* How close to reality this experiment is became poignantly evident from the Abu Ghraib prison's abuses and tortures of Iraqi prisoners by regular American (male and female) soldiers. A detailed report by the American Major General Taguba described numerous instances of 'sadistic, blatant, and wanton criminal abuses' of Iraqis by American soldiers. There was convincing evidence of systematic abuse (see also Zimbardo, 2007, p. 324 ff, for a detailed psychological analysis of Abu Ghraib).

*Milgram experiments.* In the (in-)famous Milgram (1974) experiments most healthy and balanced adult participants were easily stimulated into the inhumane act of electrocuting another human being only on the authority of the experimenter and the demand-characteristics of the scientific setting. Situational pressures seemed to override any genetic, dispositional or personality differences in determining moral choices (Blass, 2000), and more recent studies demonstrate that these findings are not confined to the past (Burger, 2009; Meeus & Raaijmakers, 1995). It might be argued that in the Milgram experiments subjects are tested for their empathic responses (to the experimenter or to the victim) instead of a morally justified reaction. In contrast, we suggest that Milgram examined moral behaviour *in vivo*, for which empathic concern as well as moral reasoning might be important but not decisive. Whatever moral competence the subjects in the Milgram experiments might have had, most of them *performed* immorally.

Kohlberg was acutely aware of the importance of these experiments for his theory and investigated their association with his moral stages. Kohlberg (1984, pp. 546–547) argued that participants' obedience to the authority of an experimenter in the original Milgram paradigm was not completely context-dependent but also predictable by their responses to the Moral Judgment Interview (MJI; Kohlberg, 1984). He reported data on 27 students who completed the Milgram experiment, either quitting against the will of the experimenter ( $n = 8$ ) or not ( $n = 19$ ). At first glance the data seem to support his hypothesis that more advanced moral reasoning was associated with quitting the torturing of the victim, as 5 out of 8 quitters were classified at the highest moral level (level 4) and only 1 student on this level did not quit. However, half of the students reasoning on the lowest level (level 3) did quit as well, and elsewhere we demonstrated that Kohlberg's conclusions do not survive statistical test in our secondary analysis (Van IJzendoorn et al., 2010).

*Milgram experiment with children.* To our surprise we discovered that in the seventies of the last century Milgram's original test of obedience had been replicated with children. Shanab and Yahya (1977) tested 192 Jordanian children (6–8, 10–12, and 14–16 years) in two kinds of punishment instructions. Half of the children received instructions similar to the original Milgram experiment, namely to administer electric shocks to learners each time the latter made a mistake in a paired-associate learning task and to increase the shock level with each additional mistake. The other half of the children were given a free choice of delivering or not delivering shocks each time the learner made a mistake. Pressed by the experimenter almost three-quarters of the children continued to deliver shocks to maximum

voltage. Only 16% of the children with a free choice went that far. The situational pressures were much more important than other factors such as age or gender.

The authors rated the emotional responses of the subjects during the Milgram experiment, recording tense behaviour like loud nervous laughter, lip biting, and trembling, and if they showed 11 or more of these emotional behaviours they were considered to display intense tension. Disturbingly, the number of children in the intense tension category significantly *decreased* with age. Of those who expressed intense tension, 44%, 25%, and 16% were in the age groups 6–8, 10–12, and 14–16, respectively. Although serious ethical doubts might be raised about the conduct of the highly intrusive experiment with adults, let alone with children, the virtual neglect of the findings from this stunning study cannot be legitimised by such ethical concerns about the experiment itself. They certainly constitute uncomfortable facts for Kohlbergian theories of moral development as progressive development toward ever higher levels of morality.

### *Situational Morality*

*Situational donating?* Examining the number of coins donated after the promotional film and then after the experimenter's probe, we analyzed the impact of situational pressure on donating. In two studies on 7-year-old children a very small minority of children was inclined to donate any money spontaneously. After being prompted by an experimenter to donate, the percentage of children who donated some or all of their money rather steeply increased to about two-third. The findings were remarkably similar across our two studies. The situational difference between watching a promotional video clip alone (including a call for donation), and with the probe of an experimenter afterwards explained around 40% of the variance in donating, whereas only half as much was explained by background variables (age, maternal educational level). Dispositional (attachment) and constitutional (temperament, genetics) differences seemed irrelevant, at least as main effects.

Increasing the situational pressures might affect donating behaviour until the point is reached that almost all children donate almost all their money to the charity when social pressures are maximised, mirroring the maltreating behaviour of most participants in the Milgram and Zimbardo experiments. What type of manipulations with children would be acceptable from an ethical point of view, even when they are meant to provoke prosocial behaviour is food for thought. Modelling or encouraging the child to donate money to a charity may constitute one end of the continuum, with making starvation of a videotaped undernourished infant the responsibility of the child being the other end. Depending on the age of the child and debriefing possibilities experimental manipulations should move along this continuum in order not to violate the ethical balance between means and ends.

*Some further evidence for situational morality.* The crucial question is whether situations can be created to channel participants' behaviour into a prosocial direction. Fortunately, some independent experimental studies suggest that this is possible. Freeman et al., (2009) tested the influence of witnessing or reading about

moral exemplars on donating to a charity. Students watching a video clip that documented moral excellence or reading a story about an extraordinary moral act or person donated more money to a charity that promoted goals somewhat antithetic to their political views. The experiments were based on Haidt's (2007) theory of moral elevation leading to more intense moral emotions and moral acts. Witnessing an act of moral excellence would stimulate thoughts, emotions and a motivational state that encourages people to show more empathic concern and caring behaviour.

Small situational changes such as installing a security camera implying the presence of an audience has been shown to result in similar enhancement of prosocial behaviour in a student sample (Van Rompay et al., 2009). Students provided more help in collecting and sorting a pile of questionnaires accidentally fallen on the floor in the presence of a camera, although the camera did not affect the participants' reported donations to charitable organisations. The dispositional trait of need for social approval also explained some variance in helping behaviour, on top of the situational characteristics.

A telling example of the power of modelling is provided by Kallgren, Reno and Cialdini (2000) who tested the influence of the presence of a confederate picking up a crumpled fast-food bag from the floor of a parking garage. Participants were visitors to a public urban hospital who were returning to their cars. When participants reached their cars, they encountered handbills attached to their windshield. Throwing the handbills on the floor was the observed outcome. The simple witnessing of the confederate picking up a piece of litter decreased littering behaviour from 43% to a mere 9.3%. With a simple manipulation of the situation (setting an example, focusing on the prosocial norm) prosocial behaviour was strongly stimulated.

In behavioural economics situational canalization of human behaviour has become a central topic of research. In their book on 'Nudge' Thaler and Sunstein (2009) present a myriad of situational manipulations that effectively change human behaviour in desirable directions without changing their moral reasoning, dispositions or motivations. A nudge is defined as any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any alternative behavioural option. Some prime examples are the following. Putting healthy food on eye-level and junk food on lower or higher levels in restaurants or shops increases significantly the choice for healthy food. Etching the image of a black house-fly into the urinals of the men's rooms at airports reduces spillage by 80%. Emphasizing that the majority of students don't binge drink instead of stressing the problem of binge drinking with alarming percentages of those who do binge drink lowers the alcohol consumption significantly. Many more examples can be provided. What is needed is a theory of situational ethics that uses 'moral nudges' to canalize human behaviour in ethically desirable directions. In behavioural economics nudge is explicitly defined as value-neutral, leaving all options open. In experimental ethics systematic reflection on the ethical dimension of conditions and consequences of nudges might provide some

counterweight against a quasi-neutral behavioural economics approach (Appiah, 2008; Doris, 2010).

#### EDUCATING SITUATIONAL MORALITY THROUGH CANALIZATION AND HABITUATION

What kind of educational intervention is compatible with situational morality? If the demand characteristics of the situation have most impact on prosocial and antisocial behaviour the logical implication is to monitor and change the environment in which children are growing up and are being educated. In fact, we argue here for an ethics of situations, that is, of embodying high moral standards in environments that canalize individual moral behaviour. In fact, if environments are considered to have both a physical as well as a social dimension embodiment of high moral standards in moral tutors and their guidelines for proper behavioural routines may be an extremely powerful force in canalizing moral behaviour in children. This comes close to the Aristotelian concept of ‘habituation’ through which virtuous affective dispositions are strengthened by conditioning behaviour with different reinforcing and punishing stimuli (Steutel & Spiecker, 2004, p. 544).

In an amazing habituation experiment De Waal (1996) mixed easy-going, tolerant but also physically larger stump-tail macaques with smaller rhesus monkeys that are known for their high level of aggression. The groups were kept together day and night for five months. Because of their dominant physical status the macaques acted as tutors and models of peaceful interactions for the excitable rhesus monkeys. After some time the rhesus monkeys began to interact in a similar fashion as the friendly macaques, not only to their dominant co-habitants but also to their own peers, and the effects remained visible after the co-habiting experiment was ended. With clever control conditions alternative interpretations were excluded, such as mere mimicry of any macaque behaviour by rhesus monkeys. It should be noted that five months of 24/7 co-habitation is equal to more than two years in a human child’s life, so the intervention may not be easily transferable to human beings.

The just-community approach to moral education, originated by Kohlberg (Kohlberg, 1985; Power, 1979; Oser et al., 2008), appears to come close to it. The project aimed at the immersion of students in an environment imbued with just and fair role models, rules and interactions, and with concrete behavioural norms of an almost Aristotelian nature (‘learning by doing’ to be on time, to abstain from fighting). Most importantly, the peers in the just community embodied and sanctioned the socio-moral norms that canalised individual students’ behaviour. Kohlberg (1985) stressed that ‘the good’ as altruism is cultivated by a ‘sense of community’, by a ‘feeling of group cohesion and solidarity’ (p. 84). Essential ingredients were: the community meeting for democratic decision-making, the discipline committee for confronting individuals with their misbehaviour and punishing and forgiving them, and moral dilemma discussions in the classroom to enhance the level of moral reasoning (Oser et al., 2008).

The just-community approach was a short-term success elevating the moral judgement level of the students, but as Kohlberg (1985, p.80) stated: ‘While the intervention operation was a success, the patient died’. One year after the conclusion of the experiment not a single teacher continued to do moral discussions. Practising moral behaviour in the just community teaches children how to be moral, but generalisation across time and settings has not yet been proved in a randomised control trial. In fact, it is the just-community setting that incorporates morality for some time, not the individual’s brain or mind, a premier illustration of situational morality.

The successful failure of this just-community experiment may have at least two educational implications. First, implementation of a just community should be prolonged and sustained across several years to effectively change the participants’ moral behaviour. De Waal’s intervention with macaque and rhesus monkeys, which appeared to lead to persistently positive changes in the rhesus monkeys’ interactions within their own group after closure of the experiment, lasted about two years on a human time-scale.

Second, part of moral education may consist of making students aware of the power of situations in determining their moral choices in experimental and natural settings. Teaching students the experimental evidence of situational morality, such as the Stanford prison experiment or the Milgram experiments, may lead to self-defeating prophecies, and create opportunities to make moral choices that deviate from the situational pressures to act in a specific (immoral) way. Discussing with students some real examples of situational immorality, such as Auschwitz or Abu Ghraib, as well as examples of canalisation of altruistic behaviour, such as donating after the tsunami, may add to their understanding of the determinants of their own moral behaviour. In fact, moral reasoning is also subjected to situational influences (Doris, 2010), and these influences might be used to enhance the level of reasoning as well as moral behaviour.

#### ONE STEP FORWARD, TWO STEPS BACK...

In sum, we have argued that moral behaviour is partly embodied and largely situation-specific. Neurobiological factors, attachment security and rearing experiences have only limited influence on individual differences in moral performance when studied in isolation. Main effects of neurobiology and socialization are hidden in their interactions. We deliberately focused on *observed* moral behaviour, as most self-report measures of moral behaviour, reasoning or intentions are doomed to be as invalid as they are reliable (Appiah, 2008, p. 44; Van IJzendoorn, 1984). Most importantly, only moral behaviour makes a difference in the most crucial moral dilemmas that may confront individuals, for example during war time or in the face of serious adversities hitting their peers.

Whether cognitive moral judgements play an important or even decisive role in moral acts, for example donation to a charity, remains to be seen. The association between cognitive moral judgements and moral actions is complex (Blasi, 1980), may go both ways, or may not exist at all. With growing age children might gain

more empathic feelings and they also might respond to moral dilemmas in an ever more morally justified way, but we have argued here that moral *behaviour* might still be mainly situationally determined. Again, it is moral behaviour that really counts as the ancient proverb suggests: the proof of the pudding is in the eating. Or, put somewhat differently: ‘What good is it if someone claims to have faith but has no deeds? (...). faith without deeds is dead’ (James 2:14, 26). In general, a rather large gap has been detected between thought and action, attitudes and behaviour, in various domains of functioning (Deutscher, 1973). It would be gratifying but hard to believe if the same were not true for moral reasoning and action.

We may have to go beyond Kohlberg’s cognitive-developmental view and neo-Aristotelian conceptions of morality by going back to ‘...Hartshorne and May (who) found, that adolescents (and by extension adults) are not divided into groups, the conscientiously honest and the dishonest. They find instead that situational factors independent of conscience appear to be the determinants of honest behaviour’ (Kohlberg, 1984, p.3).

As much as moral *competence* is a universal human characteristic, it takes a situation with specific demand-characteristics to translate this competence into actual prosocial *performance*.

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#### NOTES

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## **NEUROBIOLOGY, MORAL EDUCATION AND MORAL SELF-AUTHORSHIP**

### INTRODUCTION

The field of moral psychology is in a state of empirical abundance with handbooks and compendiums galore. On the one hand we know more about moral functioning than ever before. We understand that humans have competing moral sentiments (Narvaez, 2008b, 2009b), that moral goals can be influenced by the situation (Zimbardo, 2007; Van IJzendoorn & Bakermans-Kranenburg, this book), and that moral personality dispositions drive moral behavior in a person by context interactions (Lapsley & Narvaez, 2004; Narvaez & Lapsley, 2009). On the other hand while moral psychology research perhaps has never been more prolific, individual moral and social functioning may be on the decline. For example, moral judgment scores appear to be decreasing longitudinally in US college students (Thoma & Bebeau, 2008), as is empathy (Konrath et al., 2011) and cheating is widespread (Callahan, 2004). Youth appear to be less capacious when they reach adulthood (Bauerlein, 2008), with one of four at risk for an unproductive adulthood (Eccles & Gootman, 2002). Although psychology has provided more insights into the causes of psychopathology, depression and anxiety are more prevalent now than 50 years ago, and the USA has more people in prison than any other nation (Pew Center on the States, 2008).

How did we get to this point? Is there something fundamentally awry that is causing these poor outcomes? In my view, a critical factor in the decline of US adult morality and children's wellbeing in the USA (Heckman, 2008) is the abandonment of evolved principles of childrearing, established more than 30 million years ago (Konner, 2010). Child rearing has profound effects on brain functioning that can last a lifetime. The quality of early care shapes the functioning of multiple systems, from neurotransmitters, to immunity and stress response, to moral imagination (Narvaez, 2011b). Good early care fosters optimal (flexible, functioning) systems, but such care is rare in the USA. Poor care influences not only cognitive and physiological capacities but also expectations for community and social life. Moreover, current cultures of childrearing in most if not all Western societies emphasize left brain development, at the expense of the more holistic, contextualized, emotional intelligence inclusive of the right brain (McGilchrist, 2009; Schore, 1994).

## THE NEUROMORAL EDUCATION OF EARLY LIFE

Ecological contextualism identifies how multiple social systems (e.g., family, neighborhood, parental work life, school, societal culture) influence children's development (Bronfenbrenner, 1981). Most recently, scholars are discovering how deeply biological these effects are. Co-construction of a child's capacities begins from conception, when the developing embryo reacts to the environment provided by the mother; she in turn is affected by the community support she receives during pregnancy (and afterwards) (Hrdy, 2009). The mother's expectations for the child are conveyed through stress hormones and other neurobiological mechanisms in the womb affecting how the baby's body is constructed (Gluckman & Hanson, 2005). If a mother is stressed early in pregnancy, it has detrimental effects on the child's health in multiple ways (Davis & Sandman, 2010). Maternal depression and anxiety during pregnancy are associated with a reactive stress response and with children's subsequent rates of hyperactivity, impulsivity, and emotional and behavioral problems (e.g., Lundy et al., 1999).

Neuromoral education effects also take place at birth. Mammalian babies that are separated from the mother at birth are less attuned with the mother and more socially awkward in later life (e.g., Bystrova et al., 2009). If the baby is subjected to pain, he or she reacts with a stress response that kills neurons and may form a stressed brain (Henry & Wang, 1998); the baby also may learn to associate social life with pain and react to others with rage and/or fear, or detachment.

After birth, physiological as well as psychological education continues as early care shapes the functioning of all physiological systems through epigenetic and plasticity effects. For example, children who are neglected have more poorly functioning neurotransmitter, neuroendocrine, immune, and stress response systems (Lanius, Vermetten & Pain, 2010). When these are poorly functioning, the individual has less energy for prosociality. Much of who we become is established during the first years of life, including whether we are more agreeable, open, and conscientious (Kochanska, 2002). Although the brain is plastic, it becomes less so with age, so early patterns are foundational to later functioning (Lanius et al., 2010). Modern Western humans have culturally erased most of the practices of infant and child care that evolved to fixation, practices that are 'expected' by human brains and bodies and whose lack has detrimental effects on development (Narvaez, Panksepp et al, in press).

What are the characteristics of good early care? Anthropologists have identified the human version of this care, only slightly changed from catarrhine mammalian practices that emerged 30–40 million years ago (Konner, 2010), which reflect part of our ancestral human mammalian milieu (AHMM) (Narvaez & Gleason, in press). Along with natural childbirth (no drugs) and no separation of infant from mother, these characteristics include child-directed breastfeeding 2–5 years (4 years on average), constant touch in the first years of life, prompt response to needs, fusses and cries, multiple adult caregivers, free play in nature with multi-aged mates (Hewlett & Lamb, 2005; Konner, 2010).

Lack of AHMM-consistent care has detrimental effects on children's development and adult outcomes, including on moral outcomes such as empathy, conscience, and self control (Narvaez, Gleason et al., 2011). Usually the effects of poor early care are symptomized by poor attachment. But the consequences of poor care are much deeper than psychological constructs; they are neurobiological. Good early care fosters perhaps the highest form of intelligence, 'the ability of the organism to engage in a co-regulated affective communication, where this communication becomes more and more differentiated over time' (Greenspan & Shanker, 2004, p. 183). Without good care, development is less than optimal.

#### NEUROBIOLOGICAL UNDERPINNINGS OF MORAL FUNCTIONING

Triune ethics theory (Narvaez, 2008b, 2009b) describes the formation of moral mindsets that rely on early experience for their co-construction. Three basic brain structures emerged from human evolution and generally correspond to three moral mindsets: security, engagement and imagination. When a person uses a mindset to propel moral action, trumping other values, it is considered an ethic.

The *security* ethic is rooted in survival systems that are shared with all animals and are present from birth. In mammals, the extrapyramidal action nervous system (Panksepp, 1998) comes into play under perceived threat – physical or psychological. Threat cues activate the stress-response system, characteristic of all biological systems to some degree. The security ethic emerges when a person oriented to dominance, for example takes moral action to protect the ego either with a 'bunker', (aggressive) orientation, or a 'wallflower' (withdrawing or freezing) orientation. When the environment is chronically threatening, such as during poor early care, self-protection may become the habitual mode of the personality in social situations (Eisler & Levine, 2002). For example, Caldji, Diorio, & Meaney (2003) found that the brains of infant rats subjected to stress from poor parental care are permanently altered in neurotransmitter function. Those with poor attachment or stressed emotional systems are more likely to exhibit aggression or withdrawal as a normal mode of self protection, affecting moral behavior (Hart, Shaver & Goldenberg, 2005).

The *engagement* ethic is rooted primarily in the mammalian emotion systems that lead to sociality. The higher limbic system is co-constructed with caregivers in early life (also with caring others during sensitive periods). These structures can be easily damaged by poor care or trauma and require for their development extensive experience in mutual attunement with caregivers (Schoore, in press). Patterns of experience formed in early life become implicit physiological patterns of response that frame functioning, including moral functioning. Ideally, children develop a sense of security through intersubjectively-safe and attuned nurturing (Field & Reite, 1985; Schoore, 1994). The wash of oxytocin that accompanies breastfeeding and the tryptophan in breastmilk (a precursor of serotonin) facilitate bonding and prosocial feeling (e.g., Young et al., 2001). The engagement ethic represents the dominant mode of relating found among foraging hunter-gatherer communities (the type of society in which the human genus spent 99% of its history). In such

communities, the focus is on mutual enjoyment and emotional presence (facilitated by laughter, singing, dancing, cuddling). In this mode the prosocial emotions and hormones are most likely to prevail (e.g., oxytocin). This may have a large part to do with the peaceful nature of these societies (Fry, 2006).

The *imagination* ethic is rooted primarily in the most recently evolved parts of the brain, the frontal and prefrontal cortex (PFC). It enables the ability to think outside the present moment and about future possibilities. The PFC is highly influenced by early care and experiences during other sensitive periods. When early care is poor, the orbital frontal cortex, a part of the PFC, may not develop properly, leading to an underdeveloped prosocial emotionality (leading to the dominance of the security ethic). When linked with prosocial emotions, *communal imagination* orients to moral problem solving. When fueled by security ethic concerns, *vicious imagination* aims for ego dominance. When completely detached from emotion, *detached imagination* robotically acts towards others without moral compunction (e.g., Nazi doctors experimenting on prisoners).

As children grow they develop moral understanding through enactive participation in social life fostering a unique moral grammar for social living (Narvaez, 2010c). At first they learn sensorimotor sensibilities for justice (Lerner, 2002) from needs getting met, then from mutually co-regulated reciprocity and social exchange, all leading to a secure attachment (Kochanska, 2002). Caregivers provide scaffolding for what to attend to and perceive (e.g., ‘look at the bird,’ ‘how does your sister feel after you took her toy?’) This *enactive* learning occurs in real life situations, in which children are immersed, so moral understanding is built from experience, not detached discussions or book learning. Through guided direction while immersed, adults help structure children’s memory for moral events that children later adopt for their own self-narratives (Stipek, Recchia & McClintick, 1992). In these ways, children develop a moral identity (Lapsley, 2008; Lapsley & Narvaez, 2006).

#### FORMAL NEUROMORAL EDUCATION

When schooling starts, neuromoral education expands to include relationships beyond the family. Schooling is unnatural from an evolutionary perspective for two reasons. It involves systematic coercion, which is foreign to the animal kingdom outside of humans, and it requires extensive interaction with non-kin. When schooling starts, typically coercion becomes an everyday experience for the child. In many ways, coercion shuts down imagination, spiritual growth, and self-purposing. In most schools, children are treated systematically (for institutional purposes) at odds with their own course of development. Ideally, a school allows the child to guide his or her own development. At the same time in today’s world, because children outside of school are immersed, unsupervised, in endless examples of vicious and egocentric behavior (at least in the USA), it is important for educators to take on moral character developmental education *intentionally* (Narvaez & Lapsley, 2008) with approaches that honor evolutionary principles in keeping the security ethic from emerging and maintaining a culture where the engagement and imagination ethics are fostered.

Although moral character education can be controversial (Lapsley & Narvaez, 2006), the Integrative Ethical Education model (IEE; Narvaez, 2006, 2007, 2008a) takes on many of the challenges that arise when moral character development is integrated into academic instruction. IEE offers a multifaceted approach to maintaining a more apprenticeship-styled moral character education. The model can be used with any age group in any setting as it fosters moral self-authorship in group members. Here it is described as applied in a classroom setting.

At the outset, the educator should *establish a secure, caring relationship with the child*, so as to ensure a socially supportive context for learning and a mutual commitment to work together (Masten, 2003). Because humans are wired for emotional signaling and social motivation (Panksepp, 1998), a caring, supportive teacher more easily fosters students' empathy and prosocial behavior as well as motivation to learn (Wentzel, 1997). Education starts with the state of the child and the mindset of the teacher. Children with poor early care will have brains that are less flexible, integrated, and attentive, represented by poor attachment, but with patience and supportiveness, these children can be reached (Watson & Eckert, 2003). Deep social connections are more easily established through activities that awaken the right brain emotion centers such as music, dance, art, and joyous laughter.

A student and teacher typically do not work in isolation but in a social context with others that primes and promotes particular behaviors (Battistich, 2008; Solomon et al., 2002). Hence, the second proposal is to *create a sustaining climate that is supportive of ethical behavior and excellence* (Narvaez, 2010a). A sustaining climate takes seriously the social and work habits of students and teacher established at the beginning of the year. Relationships form the center of the classroom along with thinking and growing. A sustaining climate meets basic needs (e.g., for autonomy, belonging, competence, Deci & Ryan, 1985) which promotes peaceful coexistence. Ideally, as the teacher and students get to know one another, they co-shape classroom activities in ways that delight them. The discourse is rich with prosocial imagination (how can we help one another?) so that students move beyond thinking about themselves. The educator makes sure that the classroom is emotionally warm and engaging. Feelings are acknowledged and accepted. When things go wrong, amends are made through conflict resolution, forgiveness and restitution. Leadership is shared with the students, who have a say in important decisions. Student interests drive the activities of the classroom. With high expectations and high support, a sustaining climate cultivates mastery learning, prosocial relationships and citizenship skill development (Zins et al., 2004). A sustaining climate fosters human flourishing through positive social influences on brain and behavior, resulting in personal and group empowerment, and cultivating social, emotional and moral skills (Elias et al., 2008) through novice-to-expert instruction.

In naturalistic circumstances, individuals learn through guided apprenticeship (Rogoff, 1991) that mimics expertise development (Ericsson & Smith, 1991). Apprenticeship for moral character development involves *instruction for expertise development* (Narvaez, 2005; Narvaez & Lapsley, 2005). What skills do moral experts have that can be fostered (Narvaez & Rest, 1995)? They are more morally *sensitive* – noticing when moral action is needed and empathizing with those in need.

They use *reasoning* skills to determine what course of action might be best and reflect on their choices. They are morally *motivated* to help others. They know the steps to take for moral *action* and persevere until it is finished. See Table 1 for representative skills for each of these components, skills that can be taught in the classroom during academic instruction (see Narvaez, 2009a; Narvaez & Bock, 2009; Narvaez & Endicott, 2009; Narvaez & Lies, 2009).<sup>1</sup>

*Table 1. Suggested skills for components of moral behavior*

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ETHICAL PERCEPTION AND SENSITIVITY
Reading and Expressing Emotion
Taking the Perspectives of Others
Caring by Connecting to Others
Responding to diversity
Controlling Social Bias
Interpreting situations
Communicate Well

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ETHICAL REASONING AND JUDGMENT
Reasoning Generally
Developing Ethical Reasoning Skills
Understanding Ethical Problems
Using Codes and Identifying Judgment Criteria
Understand consequences
Reflecting On The Process And Outcome
Coping

---

ETHICAL FOCUS OR MOTIVATION
Respecting Others
Developing Conscience
Acting Responsibly
Be a community member
Finding meaning in life
Valuing Traditions and Institutions
Developing Ethical Identity And Integrity

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ETHICAL ACTION
Resolving Conflicts and Problems
Assert Respectfully
Taking Initiative as a Leader
Planning to implement
Developing Courage
Developing Perseverance
Working Hard

---

Four levels of instruction can be used to move novices towards expertise. Each involves cultivating good intuitions and deliberative understanding. First, the novice must be immersed in multiple examples of the skill and watch exemplars

using the skill so that a vision of the overall goal is formed. Second, the novice's attention is tuned to details and practice of subskills in the domain. Third, the novice practices several skills together as procedures. Fourth, the novice is able to perform the skill sets in multiple contexts. With guidance from a more-expert mentor, students build an embodied understanding (intuitions and explicit understanding) of a skill in context. School-based programs in social and emotional learning are documented to help students stop the rapid emotional response and think more carefully about action (e.g. Elias et al., 2008; Narvaez et al., 2004) and increase cognitive competencies in decision making (see Catalano, Hawkins & Toumbourou, 2008, for a review). Such education for reflective skills allows the individual to monitor intuitions, reexamine gut reactions and try to eliminate misconceptions.

Ultimately, moral character development is the responsibility of the individual. After infancy and parental influence, no one has greater power to build character than the individual herself. The choices an individual makes form her character. As a child develops, she determines more and more of her character. The more an attitude or behavior is practiced, the more automatic it becomes and the more likely the individual is to use it again. Educators can help students orient themselves to *self-authorship* by giving students practice in making choices and figuring out what talents and gifts to develop towards self-actualization within the community (Baxter Magolda, 2001). Expertise in any domain requires the individual to self-regulate through sophisticated metacognition (Anderson, 1989; Zimmerman, Bonner, & Kovach, 2002). Again, guided and explained practice helps develop the eventual capacity to self-regulate.

Finally, moral character is nurtured by the community in which it will be lived. The last critical piece of the Integrative Ethical Education model emphasizes the *restoration of the ecological network of relationships and communities that support the child's development*. Too often today, adults are distracted from attending to a child's unique developmental course. For optimal development, children need multiple supportive relationships from adults within and outside of the family. When goals and practices for child development and education are mutually adopted by families, neighborhoods and schools, optimal results are more likely (Lerner, Dowling & Anderson, 2003).

In brief summary, the IEE framework offers a collaborative model that can be flexibly applied in multiple settings and modified for local needs. Even when every local setting formulates a unique application, positive changes over comparison groups can be found (Narvaez et al., 2004). Overall the IEE provides a context that sustains the engagement and imagination ethics and keeps the security ethic under control.

#### LIFESPAN MORAL SELF-AUTHORSHIP / NEUROMORAL EDUCATION

Once an individual has left secondary school, how does moral development proceed? Here are three ways that adults can foster their own moral development.

### *Beware Truthiness in Moral Decision Making*

Good thinking is challenging. People may get drawn to the truthiness of their intuitions or of their flawed reasoning (Narvaez, 2010b). Not only is good thinking thwarted by fixed mindsets regarding learning, but also by dogmatism, superstition, and a lack of open-mindedness and counterfactual thinking (Stanovich & West, 1997). Yet people wrestle with moral decisions, commitments, transgressions, and judgments in a complex fashion and do so on a regular basis. Moral decision making includes such things as ascertaining which personal goals and plans to set, determining what one's responsibilities are, weighing which action choice among alternatives is best, reconciling multiple considerations, evaluating the quality of moral decisions made and actions taken, as well as juggling metacognitive skills such as monitoring progress on a particular moral goal or controlling attention to complete the goal. In decision making generally, a person monitors and interprets many signals, such as emotional reactions (e.g., 'my stomach is tight, I must not like x, so I won't do y'), current goals and preferences, mood and energy, environmental affordances, situational press, contextual cue quality, social influence, empathic response, logical coherence with self-image and with prior history. Moral deliberation takes into account all these aspects, involving an interplay between intuition and conscious reasoning. The agent plays 'moral musical chairs' (Kohlberg, 1981), 'feeling out' consequences of different decisions, and these skills develop from extensive, guided practice in a particular domain (see Narvaez, 2010b for full references).

### *Select Good Environments for Intuition Development*

Virtue is fostered through extensive immersion in good environments (fostering intuitions) and mentoring (fostering deliberation and assisting in the selection of environments for intuition development). One learns intuitions from the environments in which one is immersed (Hogarth, 2001). Individuals can be primed to think and feel particular ways without awareness (as advertisers are well aware). When repeated over time, these thoughts and feelings can become automatic responses to subtle cues and be established as 'intuitions' (e.g., Coca-Cola is a good thirst quencher). Therefore one who desires to be virtuous must select carefully the environments in which one spends time. However, as Aristotle also pointed out, one needs a mentor until one can guide one's own virtue development. Good parenting and adult mentorship foster a keen sense of what virtue and virtue-supporting environments look like. One must consider what kinds of skills and attitudes a particular activity will foster in the self for the longterm. Are they skills and attitudes that make one a more virtuous human being? If one does not select carefully, then one's preferences and intuitions will be formed haphazardly by others. Activities can foster one type of moral mindset or another. Environments that promote feelings of fear, anxiety and threat (e.g., violent electronic media) are prone to foster the security ethic, as the primitive parts of the brain are maintained on alert, grabbing energy from other parts of the brain (Mathews et al., 2005). Activities that foster positive social bonds (e.g., musical play) will promote feelings of social and personal wellbeing.

*Maintain Emotions and Brain Sets that Lead to Prosocial Instead of Antisocial Behavior*

Too often modern life encourages a stress response in reaction to the novelty of encountering strangers on a daily basis. In combination with early experience that makes one stress reactive to novelty (Meaney, 2001), a chronic stress response can lead to a self-centered orientation to living: the security ethic, vicious or detached imagination. To counter this pressure to focus on self-protection or distancing, here are three suggestions. First, the individual can intentionally cultivate a compassionate response to others. Mindfulness training can assist with a focus on sensory and perceptual input under relaxed breathing (Langer, 1989). Paying attention to the newness of a situation or encounter and savoring it (Bryant & Veroff, 2007) enlists the right brain holistic response and fosters an engagement ethic. A second approach is to practice social gratitude (Emmons & McCullough, 2002) in which appreciation of others is acknowledged and expressed. A third practice that fosters prosocial orientation and an engagement ethic, through a stimulation of the right brain, is immersion in delightful social activities such as playing, dancing, art and music making, and/or being in nature (Siegel, 1999). Playful activity enlivens the positive emotions and promotes emotional presence, decreasing chances for depression, self-isolation (Brown & Vaughan, 2009), and moral narcissism.

## CONCLUSION

From the beginning of life, humans are embodied creatures who are shaped by experience. The trajectory for a unique self is set in early life as the brain is being molded by relationships with caregivers. Each person's universe is different from that of another, setting up a unique personal moral grammar for the social life (Narvaez, 2011a) that shifts among engagement, security, imagination from moment to moment, situation to situation, relationship to relationship.

Yet individuals have power to change themselves. Although the beginnings of the self are established by caregivers before a child can select for herself, with autonomy throughout life, individuals can shift their personalities, capacities and virtue, 'growing themselves'. Individuals can deliberately foster one ethic or another in themselves or others by the activities they choose,--activities that enhance the ego, fear and the security ethic, or activities where they let go of the ego through interaction with nature and with others in social delight, encouraging an engagement ethic and communal imagination. The world is overfilled with the former and needs much more of the latter.

## NOTES

<sup>1</sup> Booklets similar to these are available for free download at: <http://cee.nd.edu/curriculum/curriculum1.shtml>

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