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**MORALITY: AN EVOLUTIONARY BIOLOGICAL  
PERSPECTIVE**

by

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## ABSTRACT

This study explores how human beings became moral beings. Are we the only creatures that engage in this way of thinking, doing and discerning? The ultimate focus of this study is to present an integrated perspective on the origin of morality, taking its lead from evolutionary biology. It further stresses the notion that a firmer grip on the origin of morality can provide us with a clearer understanding of what it means to be human. In the discussion of important ethical issues, it is of utmost importance to have a clear understanding of embodied existence. The study commences by gaining a more comprehensive understanding of the origin of morality, which is achieved by exploring the modern discourse on the origin thereof. It consists of an exposition of three perspectives on the origin of morality – theological, philosophical and evolutionary biological – in which the contribution of influential representatives of each perspective are in focus. The study continues with a more in-depth study of the evolutionary biological perspective on the origin of morality. This is accomplished through an in-depth study of primatologist Frans de Waal's perspective on the origin of morality. De Waal posits that morality is built into our species. Rather than coming to us top-down from God, or any other external source, morality for De Waal arises bottom-up from our emotions and our day-to-day social interactions, which themselves evolved from foundations in animal societies. De Waal's opinion on the origin of morality is assessed by means of a discussion of contemporary responses on his particular view. This research is undertaken from the basic conviction that an exclusive theological perspective on the origin of morality does not represent a comprehensive genesis of morality. Theology engaging with the evolutionary biology will, therefore, result in a more comprehensive understanding of the origin of morality.



## KEY TERMS

Morality

Ethics

Altruism

Empathy

Veneer Theory

Kin Selection

Group Selection

Frans de Waal

Edward O. Wilson

Richard Joyce

Maxine Sheets-Johnstone

Stephen J. Pope

John F. Haught

Evolutionary Biology

Philosophy

Theology

# CHAPTER 1

## THE ORIGIN OF MORALITY

### 1.1 INTRODUCTION

“A man who has no assured and ever present belief in the existence of a personal God or of a future existence with retribution and reward, can have for his rule of life, as far as I can see, only to follow those impulses and instincts which are the strongest or which seem to him the best ones.... If he acts for the good of others, he will receive the approbation of his fellow men and gain the love of those with whom he lives.” Charles Darwin (1809-1882)

This quote from *The Autobiography of Charles Darwin* (Barlow 1958:ad loc.) addresses a dominant issue in the ongoing debate between science and religion: How does one best understand the origin of human morality? Why do humans attempt to define what is right and what is wrong about their actions and thoughts? Why do people try to express what is good or bad about them being who they are? Why do people show kindness to others, even those outside their families, when they do not stand to benefit from it? Why do people feel guilty about certain actions? Are we the only creatures that engage in this way of thinking, doing and discerning? These are some of the questions that call on the phenomenon of morality. How humans became moral beings is the question to be explored. This dissertation investigates this question by firstly and shortly describing the concept of morality, thereafter formulating a problem statement, the research method and finally the study programme which includes the necessary procedures required to complete the investigation.

There is still a popular assumption that religion and morality are synonymous, which is known as a top-down view of morality. This study agrees with primatologist Frans de Waal who argues that morality is built into our species. Rather than coming to us top-down from God, or any other external source, morality for De Waal arises bottom-up from our emotions and our day-to-day social interactions, which evolved from foundations in animal societies.

In exploring the origin of morality it is crucial to understand the concept of “morality”. In the *Stanford Encyclopaedia of Philosophy*, Bernard & Joshua (2016) provides a definition of morality, but point out that a single definition of morality will not be applicable to all moral discussions. One of the reasons for this is the fact that the word “morality” appears to be used in two distinct broad senses: a descriptive sense and a normative sense (Bernard & Joshua 2016:1). The term “morality” can thus be used, according to Bernard & Joshua (2016:1), either:

- a) descriptively to refer to certain codes of conduct put forward by a society or a group (such as a religion), or accepted by an individual for their own behaviour, or
- b) normatively to refer to a code of conduct that, given specified conditions, would be put forward by all rational persons.

In the development of an ethical theory, the specific sense of “morality” a theorist uses plays a crucial role. If “morality” is used in a descriptive sense to refer to codes of behaviour put forward by distinct groups or societies, the universality of morality will be denied. According to Bernard & Joshua (2016:2) anthropologists make use of the descriptive sense of “morality” in their report on the morality of societies that they study. Bernard & Joshua (2016:2) note that some comparative and evolutionary psychologists and primatologists (Haidt 2002; Hauser 2006; De Waal 1996) have observed morality amongst groups of non-human animals.

An important remark by Bernard & Joshua (2016:2) is that any definition of “morality” in the descriptive sense must specify which of the codes displayed by a group or society count as moral. Distinctions are often made between morality, law, religion and etiquette, even within small homogeneous societies with no written language. Morality, therefore, cannot refer to every code of conduct present in a society. On the contrary, “morality” in a normative sense refers to codes of behaviour that would be accepted by anyone who meets certain intellectual and self-imposed conditions (Bernard & Joshua 2016:2). This almost always includes the condition of being rational.

The origin of morality can be explored through a variety of perspectives, for example evolutionary biology, philosophy and theology, to name a few. In this particular study morality is explored through an evolutionary biological perspective. Evolution makes

very good sense scientifically, but does it make sense theologically?

The theory of evolution, according to theologian Stephen Pope (2007:1), is now the primary explanatory context for understanding the origin of species. Scientists and writers in the last three decades have produced a significant body of literature dealing with “evolutionary ethics” and the “evolution of morality,” but Christian ethics has for the most part ignored it. Pope (2007:2) argues that regardless of various complications, Christian ethics and evolutionary theories are in principle compatible with one another. Diverse viewpoints do not have to compete with one another if interpreted properly. If one accepts the axiom that, ultimately, “truth cannot conflict with truth,” then, Pope (2007:2) believes “one can argue that the knowledge provided by the natural sciences, including that pertaining to human evolution, is consistent with, and can help to shed light on, the truth affirmed in Christian faith.”

Theologian John Haught (2010:xv) mentions that Darwin influenced our understanding of almost everything related to theology and stresses the immense worth of evolutionary biology to Christian theology. Evolution, according to Haught (2010:148):

Allows us to realize that human beings are invited to participate in the great work of creation. If we fail to keep this evolutionary perspective alive, our sense of ethical obligation – and for the Christian, the following of Christ – is in danger of being reduced to blind obedience to arbitrary imperatives and divine commands, or perhaps simply to seeking a reward in the hereafter. In that case, ethical life becomes... a matter of "killing time," and redemption becomes a matter of "harvesting souls" from a pointless universe. After Darwin, Christian theology can do better than this. Even though Darwin himself seemed oblivious to the potential his discoveries have to stimulate theological, spiritual, and ethical renewal, his theory of evolution is a great gift to Christian theology and spirituality as they seek to interpret Jesus' revolutionary understanding of God for our own age and future generations.

The revolutionary and ragged vision of life, provided by evolutionary biology, has to be taken into account in any realistic theological understanding of God, the natural world, life, human identity, morality, sin, death, redemption and the meaning of life (Haught 2010:xv). The question is not how to justify evolutionary biological views of the origin of morality in a theological discussion, but justify excluding it.

## 1.2 PROBLEM STATEMENT

A firmer grip on the origin of morality can provide us with a clearer understanding of what it means to be human. When discussing important ethical issues, it is of utmost importance to have a clear understanding of humanity. An interdisciplinary perspective will provide a more comprehensive understanding of morality. Within the field of theology an interdisciplinary approach to morality is still a very young discourse. According to Pope (2007:1), the influence of the social sciences on theology has been significant during the last century, unlike that of natural sciences. Van Huyssteen (2015:15) argues that the work of evolutionary ethics is of remarkable value for theologians. The above-mentioned are just a few indicators of the importance of theology engaging in an inter-disciplinary approach with the sciences when dealing with important issues regarding human life. It is crucial to study the origin of morality from an inter-disciplinary approach. This research will be undertaken from the basic conviction that an exclusive theological perspective on the origin of morality does not represent a comprehensive genesis of morality. Theology engaging with evolutionary biology will result in a more comprehensive understanding of the origin of morality.

## 1.3 LITERATURE REVIEW AND RESEARCH GAP

The origin of morality can be explored by various disciplines. This particular study draws attention to perspectives on the origin of morality provided by the study fields of evolutionary biology, philosophy and theology.

Experimental psychologist, Leonard Katz (2000:ix) argues that people are curious about the origin of things they consider important, such as human morality. Accounts of evolutionary adaptation explain how and why a complex adaptation first arose or how and why it has been conserved since then (Katz 2000:ix). According to Katz (2000:ix) we should not expect to find a single and unified account of human morality. Katz (2000:ix) makes the following remark in reference to the evolutionary roots of morality:

We may wonder with Darwin how exactly to divide the credit for morality between natural selection, culture and learning, but suspect like him that, especially at the later stages of the evolution of morality, culture and learning, both individual and social, had the larger roles (1871:80-81, 166, 394, 404).

It is still reasonable to speculate, with Noam Chomsky (1988:153) that “[t]he moral and ethical system acquired by the child owes much to some innate human faculty and is rooted in Nature”.

For a while now, South Africa has been transforming into a non-racial, non-sexist, democratic state in which human dignity, equality and the advancement of human rights are respected, promoted and protected under the South African Constitution Act, 1996 (Act No.108 of 1996). Grounds for the validation of ethics should be established in order to ensure that it contributes to the aforementioned ideal. Centuries of debate on the origin of ethics come down to this: Either ethical principles, such as justice and human rights, are independent of human experience, or they are human inventions. The distinction is more than an exercise for academic philosophers and theologians. The choice between these two understandings make all the difference in the way we view ourselves as a species. It measures the authority of religion and determines the conduct of moral reasoning. Philosopher Maxine Sheets-Johnstone sheds light on an understanding of morality which is grounded in the character of human nature (Sheets-Johnstone 2008:1).

According to Sheets-Johnstone, real ethics rests on a credible understanding of what it means to be human and, subsequently, on sincere explorations of human experience. These investigations indicate a morality that comes from within rather than outside. It does not originate from a consideration of, amongst others, rules, responsibilities, rights, moral judgements, moral status, moral agency or present ethical issues in Western society and the bigger world. As such it expresses an understanding of fundamental realities of human nature grounded in aspects of human existence like war, trust and the concept of death. An ethic which is formulated on the foundation of anything else than human nature, lacks firm empirical grounding. It easily loses itself in isolated hypotheticals, reductionist scenarios, theoretical abstractions, or becomes an ethical system over and above the ethics it formulates.

When viewing moral behaviour in South Africa from an evolutionary biological perspective, issues that are sometimes difficult to grasp become clearer. As evolutionary biologist E.O. Wilson (1998:ad loc.) argues, one of the dark sides of the innate tendency of moral behaviour is xenophobia, which is a familiar phenomenon in the South African context. He explains that personal familiarity and mutual interest are vital in social transactions and that moral sentiments evolved to be selective. People trust strangers with effort and true compassion is a commodity in chronic short supply. Tribes cooperate only through carefully defined treaties and other conventions. They are quick to imagine themselves the victims of conspiracies by competing groups and are prone to dehumanize and murder rivals during periods of severe conflict. They cement their own group loyalties by means of sacred symbols and ceremonies.

Studying morality from a multi-disciplinary approach, combining science with religion, might give rise to new answers to the truly important questions of moral reasoning. According to Wilson (1998:ad loc.), such an understanding can provide the most effective means of reaching consensus. No one can predict the exact form that agreements will take from one culture to the next. The process, however, can be anticipated with assurance. It will be democratic, weakening the clash of rival religions and ideologies. History is moving decisively in that direction and people are by nature too bright and contentious to abide by anything else. It can be confidently predicted that change will come slowly, across generations, because old beliefs die hard, even when they are demonstrably false (Wilson 1998:ad loc.).

The view that morality has evolved and the presence of clear pointers to the biological roots of moral behaviour in pre-human history can be seen in the work of, amongst others, primatologist Frans de Waal (2006); evolutionary biologist E.O. Wilson (2012); cultural anthropologist Christopher Boehm (2012); and philosophers Richard Joyce (2006), Maxine Sheets-Johnstone (2008) and Philip Kitcher (2011). Within the field of theology the scope of interdisciplinary dialogue with regards to morality is, to date, not very extensive. The work of Stephen Pope and John F. Haught, however, seek to engage in an interdisciplinary perspective on the origins of morality.

South Africa has a complex and diverse history regarding LGBT (lesbian, gay, bisexual and transgender) rights. The approval of same-sex marriages and unions is an issue

on which the Dutch Reformed Church in South Africa cannot reach consensus. These disagreements are primarily focused on the interpretation of various scripture passages related to homosexuality and on varying understandings of LGBT in terms of the biological sciences, psychology and other scientific research. A better understanding of our biological make-up, the origin of morality and what it means to be human, would settle the debate much faster and with an outcome of inclusivity. In the South African context, promoting a non-sexist democratic state in which human dignity, equality and the advancement of human rights are respected, religion will have to take a multi-disciplinary approach to human morality seriously.

The importance of evolutionary biology is also made visible by the fact that various scholars in other disciplines, such as theology and philosophy, make use of the work of evolutionary biologists in their studies regarding the origin of morality. It is clear that the origin of morality simply cannot be studied by making use of only one perspective. Multiple perspectives will lead the way to a fuller understanding of the origin of morality.

## **1.4 METHODOLOGY**

This study regarding the origin of morality will take the form of a literature study. According to Cronin et al. (2008:38), a literature study is a summary and critical analysis of relevant available research on the particular topic of study. The literature study is part of the qualitative research methodology. This particular study is based on qualitative conceptualising techniques and purely theoretical arguments. There is no empirical component to this study.

The research aims and objectives of this study are clear and simple. There are three aims to be achieved with this research project. The first aim is to acquire a more comprehensive understanding of the modern discourse on the origin of morality. The second aim is to study the origin of morality specifically from an evolutionary biological perspective. The third aim is critically evaluating De Waal's view on the origin of morality. The following objectives will achieve the aforementioned aims:

- 1) A more comprehensive understanding of the origin of morality will be achieved by exploring modern discourse on the topic. This section consists of an exposition of



three perspectives on the origin of morality which focus on the contribution of influential representatives. The origin of morality is studied from a philosophical, theological and evolutionary biological perspective. From a philosophical perspective the views of Richard Joyce and Maxine Sheets-Johnstone are explored. Richard Joyce is a British-New Zealand moral philosopher known for his contributions to the fundamental principle of ethic thoughts that is meta-ethics. Joyce is a prominent moral sceptic and is known for defending the moral error theory. His greatest works on morality include *The Myth of Morality* (2001) and *The Evolution of Morality* (2006). Maxine Sheets-Johnstone, a former dancer and professor of dance is presently a philosopher whose research is grounded in the movements of the tangible body. She is an interdisciplinary scholar affiliated with the Department of Philosophy at the University of Oregon. Her book, *The Roots of Morality* (2008) will be the main source when discussing her viewpoint on the origin of morality. From a theological perspective the work of theologians Stephen J. Pope and John F. Haught are discussed. They are two of the very few theologians engaging in a multi-disciplinary approach to the origin of morality. Stephen J. Pope is Professor of Theology at Boston College. His research interests include, among others, Christian ethics and evolutionary theory. Some of his most well-known publications include *The Evolution of Altruism* and *The Ordering of Love* (Georgetown, 1994) and *Human Evolution and Christian Ethics* (Cambridge 2007). He also edited essays on the Ethics of St. Thomas Aquinas (Georgetown, 2001). John F. Haught is an influential professor at Georgetown University. He specializes in systematic theology with a particular interest in cosmology, evolution and ecology. He has authored numerous books and articles, including *Science and Faith: A New Introduction* (2012), *Making Sense of Evolution: Darwin, God and The Drama of Life* (2010). In the following discussion of Haught's perspective on the origin of morality the focus will mainly be on his book titled *Is Nature Enough? Meaning and Truth in the Age of Science* (2006). An evolutionary biological perspective on the origin of morality will be studied by giving an overview of Edward O. Wilson's work. Wilson studied evolutionary biology at the University of Alabama. He then focused his career on research and teaching, including forty-one years at Harvard. With his twenty-six books and more than four hundred articles, Wilson received more than one hundred awards. The

scholars' work in both philosophy and theology being used in this study draws on evolutionary biology in order to give an inter-disciplinary perspective on morality.

- 2) The second aim of this study is a more in-depth study of the evolutionary biological perspective on the origin of morality. This will be achieved by an in-depth study of primatologist Frans de Waal's work and perspective on the origin of morality. Frans de Waal is a German primatologist who has studied and written about chimpanzees and bonobos for most of his career. He is known for drawing parallels between primate and human behaviour, from peace-making and morality to culture. In this section De Waal's standpoint concerning the origin of morality will be discussed.
- 3) De Waal's view on the origin of morality will be assessed by means of a discussion of contemporary responses on his viewpoint. De Waal scholars discussed in this study, include Barbara King, a professor of anthropology and philosophers, Philip Kitcher, Christine M. Korsgaard, Peter Singer and Robert Wright. All of the contemporary De Waal scholars featured in this study offer rich arguments and insightful comments on his view.

## 1.5 RESEARCH PROGRAMME

In studying the origin of morality multiple perspectives must be taken into account. A responsible overview of some of the most important contributions in the modern discourse on morality will, therefore, be the starting point of this study. Chapter 2 consists of an exposition of three perspectives on the origin of morality. From an evolutionary biological perspective, an overview of the work of evolutionary biologist E.O. Wilson is presented. In the field of philosophy a critical summary of the work of Richard Joyce and Maxine Sheets-Johnstone will be offered. From a theological perspective, an overview of the work of Stephen F. Pope and John F. Haught is discussed.

The study continues with an in-depth study of Frans de Waal's work on the origin of morality in Chapter 3. The study of De Waal's view on the origin of morality draws attention to a few of his critical focus points. These points include De Waal's

perspective on the origin of empathy, the “is” and “ought” distinction, De Waal’s tower of morality and his bottom-up view of morality.

Contemporary responses on Frans de Waal’s viewpoint are the focus of Chapter 4. Secondary literature on De Waal’s view of the origin of morality is discussed the study concludes with a critical summary that emphasises the necessity of considering an interdisciplinary approach when investigating the origin of morality.

## CHAPTER 2

# THREE PERSPECTIVES ON THE MODERN DISCOURSE ON MORALITY: AN INTRODUCTORY OVERVIEW

### 2.1 INTRODUCTION

This chapter focuses on the modern discourse on the origin of morality. It consists of an exposition of three perspectives which will be analysed to determine the contribution of influential exponents of each. The three perspectives – theological, philosophical and evolutionary biological – offer the most important views on the origin of morality. Philosophical perspectives on the topic are arguably the most varied, whilst theological perspectives represent a very important religious view. An evolutionary biological perspective on the origin of morality is, however, the most substantial. The scholars who feature in the discussion of each perspective are considered the most influential representatives of inter-disciplinary approaches to the origin of morality. From an evolutionary biological perspective, the work of the evolutionary biologist E.O. Wilson is discussed. Primatologist Frans de Waal, whose work is discussed at length in the following chapter, studies the origin of morality from an evolutionary biological perspective. Richard Joyce and Maxine Sheets-Johnstone’s enlightening perspectives on the origin of morality are influenced by a more philosophical approach. The theological perspectives of Stephen J. Pope and John F. Haught on the origin of morality form the last part of the literature overview.

### 2.2 EVOLUTIONARY BIOLOGICAL PERSPECTIVE

#### 2.2.1 E. O. Wilson

Edward O. Wilson (1929-) studied evolutionary biology at the University of Alabama. He then focused his career on research and teaching, including forty-one years at

Harvard. With his twenty-six books and more than four hundred articles, Wilson received more than one hundred awards. The following is a short overview of Wilson's view of the origin of morality.

As early as 1998 Wilson (1998a:53) makes the following comment in the article *The Biological Basis of Morality*:

Do we invent our moral absolutes in order to make society workable? Or are these enduring principles expressed to us by some transcended or godlike authority? Efforts to resolve this conundrum, have perplexed, sometimes inflamed, our best minds for centuries, but the natural sciences are telling us more and more about choices we make and our reasons for making them.

Moral reasoning is intrinsically interwoven with natural sciences on every level (Wilson 1998a:53). Wilson (1998a:61) is of the opinion that the dynamic relation between cooperation and individualism is the primary origin of moral instincts. These dynamic relations lead to tension. Should an individual have sufficient intelligence to judge and manipulate the tension, this will form moral instincts during genetic evolution. According to Wilson (1998a:61), “[t]hat level of intelligence allows the building of complex mental scenarios well into the future”, something which he notes occurs, as far as we know, only in humans and maybe the closest relative to humans, higher forms of apes.

Some people are more inclined to cooperative behaviour than others. This is due to the heritability of the cooperative tendencies (Wilson 1998a:63). In this regard moral aptitude will simply be like almost all other mental capacities studied to date.

With reference to the heritability of moral aptitude, the abundant historical evidence indicates that cooperative individuals live longer and leave behind a greater number of descendants (Wilson 1998a:63). As such, genes which give people a predisposition for cooperative behaviour, will become predominant in the human population as a whole. Such a process repeated by thousands of generations have inevitably lead to the formation of moral sentiments (Wilson 1998a:64).

In the chapter, *The Origins of Morality and Honour*, Wilson (2012:491) asks: “Are people innately good, but corruptible by the forces of evil? Or, are they instead innately wicked, and redeemable only by the forces of good?” He holds the view that both are applicable to man and that it will always be that way, unless man changes his genes. The reason for this is that the human dilemma is predestined in the way in which the human species developed evolutionarily and it is therefore an unalterable part of human nature. Mankind is, according to Wilson (2012:311), fundamentally imperfect creatures. In a world that is constantly changing, the flexibility that comes with imperfection is necessary. The imperfection of man makes it possible to be flexible and survive in an imperfect and always changing world.

With reference to the dilemma of good and evil, Wilson (2012:311) comments: “The dilemma of good and evil was created by multilevel selection, in which individual selection and group selection act together on the same individual but largely in opposition to each other.” Competition for survival and reproduction amongst members of the same group is the result of individual selection. Instincts are formed in each member of the group which is fundamentally selfish with regard to others. In contrast with this, group selection consists of competition between societies through both direct conflict and differential competence and the exploration of the environment. Instincts that are inclined to make people altruistic towards others (but not towards members of other groups) are formed by group selection. Individual selection is responsible for many things we call sin, while group selection is responsible for the greater part of goodness and justice (Wilson 2012:312).

According to Wilson (2012:312) it is the responsibility of the social and human sciences to think about the unending confusion caused by multilevel selection. The explanation of that is the role of the natural sciences. In the search for the ultimate origin of the human condition the distinction between levels of natural selection applied to human behaviour is imperfect (Wilson 2012:313). Selfish behaviour, including nepotism, generated relative selection and can promote the interests of the group in some ways by exploration and entrepreneurship. Yet there is a golden rule in genetic evolution. Wilson (2012:313) is of the opinion that selfish individuals conquer altruistic individuals, while groups of altruistic individuals conquer selfish individuals. The victory can never be complete; “the balance of selection pressures can not move to either

extreme” (Wilson 2012:313). Should individual selection dominate it will lead to societal disintegration.

Each member of a society has genes of which the end products are targeted by individual selection and genes that are targeted by group selection. All individuals are linked to a network of other group members. An individual’s own survival and reproductive ability is partly dependent on the individual’s interaction with others in the network. Kinship influences the structure of the network, but it is not the key to the network’s evolutionary dynamic, as wrongly stated by the inclusive fitness theory<sup>1</sup> (Wilson 2012:314). What is more important is the heritable tendency to form alliances, favours, exchange of information and deceit in daily living in the network.

In ancient history, as humanity’s cognitive abilities developed evolutionary, each individual’s network was almost identical to the network to which they belonged. Even today humanity is controlled by a need that already arose in the primate origin. Each person has, according to Wilson (2012:316), a compulsive desire to belong to a group. The individual satisfies their needs extensively in, amongst others, an extended family, organised religion, ideology or an ethnic group. In each of the individual’s groups competition for status is present, but also trust and justice, the characteristics of group selection (Wilson 2012:316). Man’s instincts remain in control but also ungraspable, but as Wilson (2012:316) states, “a few among them, if we obey them wisely, may save us”. In this regard he refers to someone who feels empathy. He also mentions that there is a vast amount of contemporary research which makes it possible to see how the impulse of morality works in the brain.

A promising starting point is the explanation of what Wilson (2012:316) calls the Golden Rule. It is possibly the only guideline found in all organised religion. Wilson argues that the rule “do not do to others that which you do not want to be done to you” is fundamental to all moral reasoning and can be described as “forced empathy”. Wilson (2012:317) refers to the neurobiologist Donald W. Pfaff (2007) who argued in

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<sup>1</sup> Inclusive fitness theory is a model in the evolutionary biology for the evolution of social behaviour. The theory refers to an organism’s genetic success that can be derived from his cooperation and altruistic behaviour. This theory was initially developed by W.D. Hamilton (1964).

*The Neuroscience of Fair Play* that the brain is an organ that is not only divided into main parts but also against itself. The primitive fear caused by stressful or anger-forming stimuli is a reaction that is understood better and better on molecular and cellular level. As soon as altruistic behaviour is altered it is balanced by an automatic closing of fear-inducing thoughts. With reference to hostile and potentially violent behaviour the individual “loses” themselves in a psychological manner. In the clash of emotions, the individual transforms their own identity to a small extent to that of the other person (Wilson 2012:317).

Wilson (2012:317) describes the complexity of the human brain as follows: “The brain of our Janus-like species is a supremely complex system of intersecting nerve cells, hormones, and neurotransmitters. It creates processes that variously reinforce or cancel one another out, according to context.” Fear is partly a flow of impulses that passes through the amygdala. The amygdala is an almond-shaped structure in the brain that contains links to the nerve cell routes. These connections to the routes contribute to fear, the memory of fear and the expression of fear. Signals that move through these connections subsequently integrate and move to other parts of the forebrain and midbrain. It seems that although the emotion of fear comes from the amygdala, more complex fearful thoughts about a specific person or object, which causes the fear, stems from the information processing centra of the cerebral cortex.

Wilson (2012:318) refers to a second point with regard to the automated nature of the suppression of fear and anger. The circuits of the *gyrus cinguli*<sup>2</sup> and the *insula*<sup>3</sup> help to mediate the emotional reaction to the sensation of pain. The circuits do not only affect the reaction to the individual’s pain but also the perception of another person’s pain. The produced processes built in the brain’s circuit network activated by fear, mental stress or other emotions can justify a practically endless collection of ethically acceptable behavioural choices (Wilson 2012:318).

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<sup>2</sup> The *gyrus cinguli* is a part of the brain in the medial aspect of the cortex. It is an integral part of the limbic system which is involved in the formulation of emotions and also processing, learning and memory.

<sup>3</sup> The *insula* is the lob in the middle of the cerebral hemisphere. The insula helps with the regulation of emotion and motoric control function.



The above-mentioned ethical decision making process can resonate with evolutionary biology's understanding of group selection. Human creatures are programmed to be moral – do the right thing, withhold, give aid to others, even if at own risk – because natural selection benefited the interactions of group members who advanced the group (Wilson 2012:319). In addition to the origin of instinctive empathy, group selection can at least be called upon to explain cooperation, an even more important characteristic of human nature. Wilson (2012:319) refers to Ernst Fehr and Simon Gächter (2002) who explains the problem as follows:

Human cooperation is an evolutionary puzzle. Unlike other creatures, people frequently cooperate with genetically unrelated strangers, often in large groups, with people they will never meet again, and when reproductive gains are small or absent. These patterns of cooperation cannot be explained with the evolutionary theory of kin selection and the selfish motives associated with signalling theory or the theory of reciprocal altruism.

Selection on the grounds of family relations cannot be the solution to the paradox (Wilson 2012:320). A mathematical analysis shows that selection on the grounds of family relations itself is unpractical as a dynamic evolutionary force. When closely related individuals come together so that individuals are more prone to meet other genetic cooperative individuals, the result will not in itself promote the origin of cooperation. Only group selection in groups with many co-workers against gene groups with less workers will lead to a shift in the level of the species to greater and more intense collaboration (Wilson 2012:320).

The naturalistic understanding of morality does not lead to absolute convictions and unquestionable judgements, but rather warns against blindly basing it on religious and ideological dogma (Wilson 2012:326). There is, according to Wilson (2012:328), a principle that must be learned in the study of the biological origin of moral reasoning: “It is that outside the clearest ethical precepts, such as the condemnation of slavery, child abuse, and genocide, which all will agree should be opposed everywhere without exception, there is a larger grey domain inherently difficult to navigate.” The explanation of ethical principles and judgements made from the grey area demands a

full understanding of why someone cares about a particular case. It includes the biological history of the emotions involved.

Wilson (2012:328) concludes by asking: How will we feel about morality and honour with a deepened self-understanding? He has no doubt that in many cases, possibly the majority, the principles shared by most societies will pass the biologically-based realism test and continue to exist. Others, for example the banning of artificial insemination, judgement of homosexual preference and forced marriages of adolescent girls will not pass the test. Whatever the outcome, it seems clear to Wilson (2012:328) that ethic philosophy will benefit from a reconstruction of its principles based on both science and culture. “[I]f such greater understanding amounts to the ‘moral relativism’ so fervently despised by the doctrinally righteous, so be it” Wilson (2012:328).

Wilson’s position is clear. The origin of morality should be studied with the help of natural sciences. He particularly leans on the neurobiological science to get a glimpse of the origin of empathy and altruistic behaviour. Altruism does not come from kin selection, according to Wilson, but is based on the biological instinct to promote the wellbeing of the group. Altruism is, therefore, a result of group selection.

## 2.3 PHILOSOPHICAL PERSPECTIVE

### 2.3.1 Richard Joyce

Richard Joyce (1966-) is a British-New Zealand moral philosopher known for his contributions to the fundamental principle of ethic thoughts that is meta-ethics. His greatest work includes *The Myth of Morality* (2001) and *The Evolution of Morality* (2006). He received his PhD from Princeton University in 1988 and is currently a professor at the Victoria University of Wellington. Joyce is a prominent moral sceptic and is specifically known for defending the moral error theory. Moral error theorists argue that moral judgements are statements of which the truth can be evaluated. Yet reality does not offer the required characteristics (for instance moral goodness, evil, moral obligation) necessary to distinguish moral judgements as truth. In other words, moral discourse aims for the truth, but does not systematically succeed to ensure it.

The investigation into Joyce's perspective on the origin of morality focuses on his works *The Evolution of Morality* (2006a) and *Is Human Morality Innate?* (2006b). Singer (2006:ad loc.) states "Is morality innate? If it is, what difference does that make? A reader wishing to become clearer about these questions would be hard-pressed to find a better place to begin than Richard Joyce's *The Evolution of Morality*." Joyce's studies utilise a wide variety of research in animal behaviour, anthropology, play theory and neurophysiology. Joyce (2001) in *The Myth of Morality*, argues that our current understanding of morality leaves much to hope for. The origin and nature of morality must be reconsidered, since that which is held up in the current debates can hardly be defended.

Joyce (2006a:140) comes to the conclusion that there is not a specific gene for morality, just as there is not a specific gene for breathing. So is there also not a part of the brain specifically allocated to pass moral judgements. Morality is mostly complicated, vague and moral judgement implicates, without a doubt, many different psychological and neurological mechanisms. Yet these warnings against simplistic thought does not lead to the disregard of Joyce's hypothesis (2006a:140) that moral thought is biologically determined. So too is the hypothesis not undermined by the

observation that moral thoughts greatly depend on environmental nuances. Mechanisms of cultural transfer play an enormous role in the determination of the contents of an individual's moral conviction. Joyce (2006a:104) remarks that “[t]his is consistent with there being an innate ‘moral sense’ designed precisely to make this particular kind of cultural transmission possible”.

To the question: “What evolutionary process is responsible for the human moral nature?”, Joyce (2006a:140) answers “one glaring datum is that all human moral systems give a leading role to reciprocal relations”. It seems highly possible that reciprocation is a central evolutionary problem which morality is designed to solve. This statement does not disregard other evolutionary processes. Selection in groups – possibly on cultural level – can also be a core contributing factor. Evidence provided by primatology, experimental economy, neuroscience, development psychology and anthropology suggest that the human mind has traces of a past where reciprocation plays a big role. Joyce (2006a:141) makes the following comment in this regard:

The human interest in acquiring knowledge of others' reputations and in broadcasting one's own good reputation, our sensitivity to issues of disruptive fairness in exchanges, our capacity to distinguish between accidental and purposeful harms (and our inclination to forgive the injuries of former kind), our sensitivity to cheats and our antipathy toward them (our eagerness to punish them even at material cost to ourselves), and our heightened sense of possession – all these arguably innate tendencies suggest a mind built for reciprocation.

Although the hypothesis around reciprocation is left undeveloped, Joyce (2006a:141) makes a number of comments to prevent any misunderstandings. Firstly, it is clear that the great number of contemporary moral practices have little to do with reciprocation: our responsibility towards children, those with disabilities, future generations, animals and the environment is maintained for argument's sake without any expectation concerning compensation in any form. This objection misses the point because these considerations barely undermine the hypothesis that it is for the regulating of reciprocation that morality evolved in the first place. The claim is not that only reciprocation maintains relationships.

In the second place one can object to the allegation that a person takes part in a reciprocal relationship for the sake of their own interest and is therefore only motivated by selfishness – the antithesis of moral thought. Joyce (2006a:142) describes this objection as complicated and states that “[e]ntering into reciprocal relations may well be fitness advancing, but this implies nothing about the motivations of individuals designed to participate in such relations”. Reciprocal creatures can take part in such transactions for selfish motives, altruistic motives or their transactions can merely be conditioned reactions that are neither selfish nor altruistic. Genes in reciprocal organisms, motivated by selfishness can easily be conquered by genes in reciprocal organisms motivated by the wellbeing of their chosen transaction partners. The hypothesis that human capacity to conduct moral judgement is the result of biological natural selection can be seen in a positive light (Joyce 2006a:142).

In the chapter titled *Is human morality innate?* (Joyce 2006b:1), Joyce aims to clarify the claim that morality is inborn. He argues that should human morality indeed be inborn, there can be an explanation that is not based on selection in groups, but only in particular appeals to individual selection as so called “reciprocal altruism” (Joyce 2006b:1). This view is not motivated by any theoretical or methodological bias against selection in groups. Joyce (2006b:1) admits that selection in groups is a legitimate evolutionary process and that it may well have a dominating role in the evolutionary development of morality. There is uncertainty about which process, or combination of processes any given alteration produced and hopefully in time enough evidence will come to light to resolve this issue. “At present, though, the evidence is insufficient regarding human morality” (Joyce 2006b:1). Joyce (2006b:1) prefers to focus on reciprocity rather than selection in groups and provides the framework for a coherent and uncomplicated hypothesis.

The debate around the “innateness of morality” generally deals with the investigation into whether there is an explanation of adaptation to morality in genetic terms. Joyce (2006b:1) argues that “the present-day existence of the trait is to be explained by reference to a genotype having granted ancestors reproductive advantage, rather than by reference to psychological processes of acquisition”. Should morality be innate in this manner it would not follow that there is a “gene for morality”. This formulation of

innateness and the reference to “human nature” does not imply any doubtful metaphysics around a human essence.

How easily factors in the environment can affect the development of any genetically-programmed feature is, according to Joyce (2006a:258), an empirical question that has to be addressed on a case-by-case basis. One could assume that the tendency to pass moral judgement is the result of an innate conditional strategy approach. In such a case even the existence of societies which do not have a recognisable morality could not be seen as contrary to the presumption that morality is part of human nature, since these communities likely do not have the necessary prehistory of having a certain value system. Indeed, if our living conditions were different in an appropriate manner to those of our ancestors then there would, in principle, be no moral society with a moral system – not a single moral person in the whole modern world – and yet the claim that morality is innate can be defended (Joyce 2006b:2). These possibilities are mentioned to emphasise that if something is part of our nature it does not mean its manifestation is inevitable. Joyce (2006b:2) emphasises the presence of moral systems in human societies with reference to the work of Roberts (1979), Brown (1991) and Rozin et al. (1999).

Except for varying standpoints about innateness, the hypothesis that human morality is innate is also influenced by uncertainty about what is meant with the term “morality”. Joyce (2006b:2) is of the opinion that with the help of two perspectives one can move a step closer to clarity. On the one hand the claim that humans are naturally moral animals can mean that we behave naturally in a manner that is morally praiseworthy – that the process of evolution designed us to be, amongst others, social, friendly, benevolent and just. No one can argue that people always behave virtuously, because it is clear that we can also be violent, selfish, insensitive, lying and unpleasant creatures.

Alternatively, the hypothesis that people are naturally moral animals can be understood in the sense that the process of evolution designed us to think in moral terms. That biological natural selection gave us the tendency to implement moral concepts. According to the first understanding the term “moral animal” refers to an animal that is morally praiseworthy; according to the second understanding it refers to

an animal that judges morally (Joyce 2006b:3). Like the first interpretation, the second acknowledges variation; by asserting that we pass moral judgements by nature can mean that we are designed to hold specific moral beliefs towards specific things. It can also mean that we have the tendency to experience something as morally insulting or praiseworthy (amongst other things), of which the content is determined by conditional environmental and cultural factors. These possibilities represent endpoints of a continuum, therefore an intermediate position is defensible. Joyce (2006b:3) is interested in the second hypothesis.

The emphasis is on the question about the innateness of the human capacity to pass moral judgements and it should be clear that arguments and data concerning the innateness of human pro-sociality do not contain any conclusions about innate morality. An evolutionary explanation of pro-social emotions such as altruism, love and sympathy cannot give an evolutionary explanation for moral judgement (Joyce 2006b:3). Moral judgement requires, among other things, the capacity to understand rejection.

When discussing the evolution of moral judgement, it is necessary, according to Joyce (2006b:4, also see Joyce 2006a:70), to get a firm grip on what morality and moral judgement are. There are two ways of thinking about morality: in terms of a distinctive subject (with regard to interpersonal relations) or in terms of what can be called the “normative form” of morality (a specifically authoritative manner of evaluation). Regarding the two ways morality can be referred to, “[a]ny hypothesis concerning the evolution of a moral faculty is incomplete unless it can explain how natural selection would favour a kind of judgment with both these features” (Joyce 2006b:5).

Joyce (2006b:5) does not intend to determine that morality *is* innate, but to address why it *could be*: What makes moral judgment adjustable and what evolutionary forces may have been involved in this development? He concludes that concrete evidence is necessary to prove that morality *is* innate and in this regard he suggests that the strongest evidence for innate human abilities comes from development psychology.

In the search to an answer to the question why natural selection would develop a moral characteristic, Joyce (2006b:6) notes that selection in groups can be seen as an

explanation if it can indicate how individuals contribute to the interests of the group by passing pro-social judgements<sup>4</sup>. An explanation in terms of individual selection must indicate how the execution of authoritative pro-social judgements benefit the inclusive reproductive fitness of the individual. Pro-sociality in terms of individual selection can be explained by the process of kin selection, mutualism and reciprocal altruism. Joyce (2006b:6) focusses on reciprocal altruism. The viewpoint Joyce (2006b:9) wants to promote is that in cognitive developed creatures moral judgement can contribute to reciprocal exchange:

It may contribute to their success in a fitness-enhancing manner, such that a creature for whom reciprocal relations are important may do better with a sense of *obligation* and *prohibition* guiding her exchanges than she would if motivated solely by 'unmoralized' preferences and emotions.

The benefits of reciprocation could therefore anticipate the selection pressure which the human moral orientation developed.

Joyce (2006b:11) distinguishes altruism in a psychological and evolutionary sense. In a psychological sense the motives by which an action is executed is greatly the determining factor whether it is "selfish" or "altruistic". The latter is a more complex and controversial matter consisting of a creature who lowers his inclusive reproductive fitness while the fitness of another creature is promoted. Reciprocal altruism is not an example of evolutionary altruism (Joyce 2006b:11, compare Sober 1988); in a reciprocal exchange no party forfeits fitness for the sake of another. Joyce (2006b:11) prefers to replace the term "reciprocal altruism" with "reciprocal exchange" or just "reciprocation". It refers to a process where cooperation and aid develops behaviour evolutionary and not necessarily a process where altruism develops evolutionarily.

The point that Joyce (2006b:11) emphasises is that reciprocal creatures in reciprocal exchanges can take part for selfish motives, altruistic motives or their exchanges can merely be conditioned reactions which cannot be described by selfishness or altruism.

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<sup>4</sup> "Pro-social behaviour" refers to behaviour that is positive, helping and employed to promote social acceptance. "Pro-social judgement" refers therefore to judgements passed that contribute to the good of the group in general and social acceptance in the group.



The big question remains: What practical benefit comes from moral thought? Someone who tries to explain morality as a biological phenomenon by only studying individual selection, can find two separate questions of value: What benefits are there to the individual by judging *others* in moral terms? What benefits are there to the individual judging themselves in moral terms?

Joyce (2006b:15) concludes that moral judgement of the self can promote reproductive fitness as long as it is linked to the appropriate actions. The “appropriate actions” – that is the actions that promote fitness – will in many cases include aid and cooperative behaviour. Hence an individual’s fitness can be promoted by judging some of the individual’s pro-social behaviour in moral terms. On the other hand, benefits that come from cooperation – for instance higher status – is typically long-term values. These long-term benefits are no guarantee that the objective will be pursued effectively.

Regarding the question posed by David Lahti (2003): “Why has natural selection not simply created people with stronger desires that directly benefits cooperation in certain circumstances?”, Joyce (2006b:16) notes: “After all, for some adaptive behaviours this is precisely what evolution has granted us”. The author subsequently argues that protective behaviour towards our descendants seems to be regulated by robust raw emotions, not primarily by any moralistic sense of responsibility.

It is still reasonable to enquire about what special characteristics a moral judgement can have that makes it appropriate to the evolutionary task to which it is speculatively linked. According to Joyce (2006b:17) an important part of the answer concerns the public nature of moral judgement. The manner in which thought is given to behaviour in terms of moral positive terms and thus the promotion of the execution thereof cannot be separated from the public sphere.

Joyce (2006b:18) makes the following remark with regard to Lahti’s unanswered question:

Lahti’s puzzle is solved when we realize that a moral judgment affects motivation not by giving an extra little private mental nudge in favour of certain courses of action, but by providing a deliberative consideration that (putatively) cannot be legitimately

ignored, thus allowing moral judgments—even self-directed ones—to play a justificatory role on a social stage in a way that unmediated desires cannot.

This reasoning leads Joyce (2006:18) to supplement the simple hypotheses which posits that it is the evolutionary function of the moral judgement to provide added motivation in favour of certain adaptable social behaviour. Moral disapproval of the individual's own action (or potential action) – against the dislike of the action – provides a basis for corresponding other directed moral judgements. It does not matter how little an individual likes something, the tendency alone is not relevant to the individual's judgements concerning others who persist with it. Joyce (2006b:18) is of the opinion that although he talks of moral judgements as the reinforcement of the motivation for cooperation, he does not mean to imply that man is designed to be unconditional co-operators. The moral sense is not a tendency to judge cooperation as morally good in any circumstances.

In conclusion, Joyce (2006a:222) defends natural selection and is of the opinion that it does not deserve the bad blow given by, amongst others, Huxley and Williams<sup>5</sup>:

It is the process that has made us sociable, able to enter into cooperative exchanges, capable of love, empathy, and altruism – granting us the capacity to take a direct interest in the welfare of others with no thought of reciprocation – and has designed us to think of our relations with one another in moral terms. Why has Mother Nature granted us this bounty? Not for any laudable purpose (so let's not sing her praises too loudly), but simply because being nice helped our ancestors make more babies.

It is naive to think this natural pro-social tendency involves non-cognitive feelings, behavioural attitudes, inclinations, disapproval and preference, but not convictions. The admittance of convictions under the influence of natural selection evokes epistemological concerns, because the credible representation of reality is only of conditional instrumental value when reproductive success is the cornerstone. It forces us to admit that if false beliefs in certain domains will produce more descendants then

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<sup>5</sup> George C. Williams and Thomas Henry Huxley were evolutionary biologists.

it is the route that natural selection will take each time. Moral thought may as well be such a domain.

Joyce (2006a:222) is of the opinion that which passes as “prescribed evolutionary ethics” begins with the assumption that the human moral sense is a product of evolution and aims to make a moral conclusion from this assumption. In response it is often observed that no amount of prescriptive historic information in itself can dictate to a person what they should do. But evolutionary ethics, as argued by Joyce, (2006a:222) has a deeper, more distressing side. Pure prescriptive information does not tell a person what they should do, but can have an undermining effect on their considerations.

In the succeeding part of the philosophical perspective on morality the work of Maxine Sheets-Johnstone is studied. Sheets-Johnstone studies the foundation of morality.

### 2.3.2 Maxine Sheets-Johnstone

Maxine Sheets-Johnstone (1930-), a former dancer and professor of dance is presently a philosopher whose research is grounded in the movements of the tangible body. She is an interdisciplinary scholar affiliated with the Department of Philosophy at the University of Oregon. Sheets-Johnstone’s publications include: *The Phenomenology of Dance; Illuminating Dance: Philosophical Explorations; the “roots” trilogy – The Roots of Thinking, The Roots of Power: Animate Form and Gendered Bodies, and The Roots of Morality; Giving the Body Its Due; The Primacy of Movement; and The Corporeal Turn: An Interdisciplinary Reader.*

In the *The Roots of Morality*, which forms the basis of the investigation into Sheets-Johnstone’s perspective on the origin of morality, light is shed on an understanding of morality which is grounded in the character of human nature (Sheets-Johnstone 2008:1). The accompanying thesis posits that real ethics rests on a credible understanding of what it means to be human and subsequently “on bona fide explorations of human experience, of the phylogenetic and ontogenetic heritages of humans, of the human psyche, and of elemental facets of human existence” (Sheets-Johnstone 2008:1). The conduction of these investigations expresses a morality that

comes from within rather than from outside. It does not go forth from a consideration of rules, responsibilities, rights, moral judgements, moral status, moral agency, present ethical issues in the Western society and the bigger world, to name a few. The emphasis falls on the investigation of fundamental realities that form part of human nature (Sheets-Johnstone 2008:1). As such, it expresses an understanding of fundamental realities of human nature grounded in pan-cultural<sup>6</sup> aspects of human existence like war, trust and the concept of death. In other words, Sheet-Johnstone articulates a fundamentalist morality.

Sheets-Johnstone (2008:2) is of the opinion that an ethic which is formulated on the foundation of anything other than human nature, anything other than an identification of pan-cultural realities, lack firm empirical grounding and

[E]asily loses itself in isolated hypotheticals, reductionist scenarios, or theoretical abstractions – in the prisoner’s dilemma, selfish genes, dedicated brain modules, evolutionary altruism, or psychological egoism, for example – or it easily becomes itself an ethical system over and above the ethics it formulates.

In the latter case, by specifying how ethics must be considered and how there must be acted in the light of the consideration, we are bound to a specific theoretical system of thought. Consequently, we are also bound to a correlative set of prescripts to guide our actions. Ethics considered as a system of responsibilities that requires us to behave according to “categorical imperatives” is prescribed for example.

In her search for the basis of morality, Sheets-Johnstone (2008:3) refers to a foundation, as laid by Hume, which is of value to her investigation and argues that “[w]hat is distinctive about Hume’s analysis of ‘moral subjects’ is his attempt to ground ‘the moral sense’ in human nature and his discovery that that nature harbours dichotomous tendencies”. Hume finds that people have a natural inclination to be both sympathetic and unsympathetic towards others. While “kind affection” (Sheets-Johnstone 2008:3, compare Hume [1739] 1888:482) towards others is not universal, sympathetic feelings connect people with each other, not just family and friends, but

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<sup>6</sup> The use of “pan-cultural” refers to “across all cultures”. “Pan-cultural aspects” are, therefore, aspects that are applicable to people of all cultures.

also with strangers with whose fate one sympathises. On the other hand, man's "natural heart" leads to selfish possessiveness which is unlimited, permanent, universal and directly damaging to society (Sheets-Johnstone 2008:3, compare Hume [1739] 1888:486).

Hume's analysis of human nature is consistently rich in insights and relatively rich in methodological rationale. He attempts to offer an analysis of moral subjects on the basis of a close observation of human life (Sheets-Johnstone 2008:5). The result is the compilation and comparison of observations, which are considered experimental evidence. Hume's experimental observational findings regarding human nature can be seen as clues to the phenomenology of feelings underlying human morality – or even better, the fundamental moral tension underlying human social behaviour. The clues will, according to Sheets-Johnstone (2008:5) pave a phenomenological way to the explanation of the distinctive origin of sympathy and selfishness. In the light of Hume's central involvement with human nature, his recognition of human nature as the starting point for understanding human morality and his resulting insights into the character of human morality, the clues he offers are extremely convincing.

Sheets-Johnstone (2008:28) refers to four perspectives that illustrate the motivational power of the human life/death polarity. The four perspectives are mythology and religion, patriarchal symbolism, the practice of contemporary Western sciences and the cultural practice of war. These perspectives show on a deeper level how people are motivated to take on self-defensive attitudes, beliefs and values against the unknown and feared member of the polarity or "to embrace cultural tenets and meanings that give enduring significance to their lives and, in effect, outstrip death" (Sheets-Johnstone 2008:29). These fundamental motivations have moral distinction and cannot be discovered in itself in the aforementioned perspectives. On the contrary, legendary stories, theological ideologies, symbolic dreams, feats of engineering and cultural practices see themselves in one way or another against the natural reality of human life. These fundamental motivations for people's moral remarkability is clearly discovered by an investigation of human nature itself. It contains explanations of the natural social tendencies of people, their ontogenetic and phylogenetic roots together with their cultural expansion, extinction, enlargement and suppression (see Sheets-

Johnstone 1994 for a further analysis and description of how culture transforms nature).

Sheets-Johnstone (2008:29) notes that the serious viewing of the fundamental nature of human morality means the cultivating of a philosophical, ontogenetic and phylogenetic understanding of human nature. Human morality is not an addition to human behaviour or human thought, but the expression, misinterpretation, expansion, neglecting or suppression of social tendencies fundamental to human nature. Together with this is the characteristic attitudes, beliefs and values which originated from it.

Sheets-Johnstone (2008:29) remarks:

Short of elucidating these proclivities and the binary modes of thought to which they give rise, one consistently falls short of fundamental understandings of human morality. In turn, one can only continue wringing one's hands at the disastrous doings of humans – doings that are disastrous not only to themselves but to a stunning diversity of other living beings, and to the earth that is the very condition of the possibility of these lives at all.

She is furthermore of the opinion that especially now, in the early years of a relentlessly violent and war-hungry century, questions about human nature must be thoroughly investigated in the character of that nature.

Any explanation of the origin and nature of human morality must take the powerful and inevitable pan-cultural human awareness into account. Death is the great pan-cultural human equalizer and the human awareness of death is an almost lifelong awareness (Sheets-Johnstone 2008:36). The awareness that death awaits all people, that man's life is at stake and will be until he dies, is an awareness unique to humans. Humans are, according to Sheets-Johnstone (2008:36), the only animal species that is aware that they lead an ending existence. Man's awareness of the finality of death is a formidable and heavy life sentence. It is only natural that this sentence be prominent in human morality and theoretical formulations of human morality (Sheets-Johnstone 2008:36).

Sheets-Johnstone (2008:36) shows how size, power and death is interrelated components of human morality. She further shows, from the perspective of the interrelationship of the components how the basis of morality is imbedded in the awareness and fear of death. A full account of the basic components of human morality requires a study of the closely related components thereof. It particularly involves caring, empathy, trust and play, and a study of both ontogenetic and phylogenetic perspective (Sheets-Johnstone 2008:36).

In her discussion on the origin of morality, Sheets-Johnstone commences with a discussion of size, a biological marker of power. Then she shows how vulnerability is a biological fact of life and how power provides protection against vulnerability. She continues to identify ways wherein biological value of size, in other words power, is culturally transformed and how as transformed it is linked to the biological fact of death. Sheets-Johnstone (2008:36) uses the work of scholars in evolutionary ethics and cultural studies of evil and death.

In summary, Sheets-Johnstone (2008:55) is of the opinion that evolutionary explanations of human morality have to take the concept of death into account because the foundation of human morality is imbedded in the human awareness and fear of death. To deny death is to deny vulnerability and to deny vulnerability is to surrender to powers higher than the individual's abilities. By admitting the temporary reality of the human condition the individual is open to the possibility of a universal morality. Withholding of immortality ideologies and striving towards a universal morality requires both courage for introspection and a positive admittance of the subjective. To live with the truth of the human condition requires learning to separate truth from immortality ideologies and sacrificing ultimate answers. Prevention is not easy, but it paves the way to the possibility of a universal morality grounded in the fundamental truth of human existence.

Man's ability to care, trust, empathise and have deep feelings for others is essential to the development of moral awareness and the awareness of a fully resonant human creature (Sheets-Johnstone 2008:193). For Sheets-Johnstone empathy goes to the evolutionary heart of humanity. Empathy gives access to the mental processes of

others and through empathy man can discover the feelings and values of others. Empathy is how people make sense of each other in other ways than language.

In the reflection of man's own empathetic action the main phenomenon is not only a body but a moving body (Sheets-Johnstone 2008:199). Her work on the origin of morality is interwoven with the fact that in hominid and human history an embodied empathy clearly developed. Movement is a dynamic evolving event and man has in essence perceptions of movement, as well as feelings of movement: "we perceive our movement as a kinetic three-dimensional happening; and we feel qualitative dynamics of our movement kinaesthetically" (Sheets-Johnstone 2008:199). In this sense empathy is indicated as somatic; it involves a moving body and "in empathy we move in ways we are moved to move" (Sheets-Johnstone 2008:207).

Sheets-Johnstone (2008:203) makes an important conceptual distinction between impression and empathy. Both impression and empathy begins with an emotional resonance, but impression uses the experience of emotional resonance and automatically reworks the experience into another form of expression (Stern 1985:145, compare Sheets-Johnstone 2008:203). Impression is automatic and occurs largely without awareness thereof (Sheets-Johnstone 2008:203). Empathy on the other hand involves the accompaniment of cognitive processes. For Sheets-Johnstone empathy is also the embodied form of responsivity (2008:215). Empathy is never only in a form of mental construction and a one-sided experience. It is more probably a spontaneous reaction on the direct experiences of others.

Sheets-Johnstone refers to the necessity of taking ontogeny and natural signs into account (Sheets-Johnstone 2008:349). Ontogeny refers to the origin and development of an organism. People are clearly, according to Sheets-Johnstone (2008:349), not born with a moral sense more than they are born "good" or "bad". They are, however, naturally inclined to acquire a moral sense and consequently naturally equipped with the abilities to be "good" or "bad". Certain phenomena in ontogeny points to the origin of morality. It refers to certain developmental phenomena which are natural signs that include tendencies and forms the grounds of a moral sense (Sheets-Johnstone 2008:349). In the search of the origins of human morality the start cannot be on a mature level. An ontogenetic perspective is essential. The individual does not learn to



express personal feelings kinaesthetically, except in cases where he or she learns what is culturally or familiarly acceptable or not. This regulating takes place over and above the individual's own kinaesthetic tendencies. The basic similarity is completely natural. From there a "sign", in other words any affective movement, is fundamentally a natural sign. According to Sheets-Johnstone (2008:350) such natural signs are part of a species' kinaesthetic semantic and in a broader sense part of an evolutionary semantic (see also Sheets-Johnstone 1990, 1999a, 1999b).

Sheets-Johnstone aims to understand the origin of morality by affective impression and empathy. She develops a type of bottom-up understanding of morality which is grounded in the character of human nature. An evolutionary approach to understanding the origin of morality implies, for Sheets-Johnstone, a phenomenological investigation of human experience. It requires the investigation of the ontogenetic origin of people, experiences of the embodied human psyche and of the basic facets of embodied human existence (Sheets-Johnstone 2008:1). A morality that flows from an investigation into the fundamental evolutionary reality of human nature is implied. Sheets-Johnstone articulates a multi-disciplinary and layered understanding of human morality that is ultimately grounded in a natural history of morality. By following the historic line of Hume, Rousseau and Hobbes Sheets-Johnstone regains a strong empirical approach that is based on evidence of both personal and social experience. The challenge for Sheets-Johnstone is to discover the character of the human condition based on the different profiles that come forward in the careful observation of human nature. In this way the aim is to take the first steps toward revealing of the roots of morality.

Next, a theological perspective on the origin of morality will be discussed by studying the research of Stephen J. Pope and John F. Haught.

## 2.4 THEOLOGICAL PERSPECTIVE

### 2.4.1 Stephen J. Pope

Stephen J. Pope (1969- ) is a Professor of Theology at Boston College. His research interests include Christian ethics and evolutionary theory, charity and natural law in Aquinas and Roman Catholic social teachings. He obtained his PhD in theological ethics from the University of Chicago in 1998. Some of his most well-known publications include *The Evolution of Altruism and the Ordering of Love* (Georgetown, 1994), *Human Evolution and Christian Ethics* (Cambridge 2007) and he edited *Essays in the Ethics of St. Thomas Aquinas* (Georgetown, 2001).

This investigation into Pope's perspective on the origin of morality focuses on one of his more recent publications, *Human Evolution and Christian Ethics* (Cambridge 2007).

In the chapter titled *The natural roots of morality*, Pope (2007:250) begins his discussion of the natural foundations of morality with the following comment:

Evolutionists have advanced several theories of how morality as a social institution is related to human evolution. They offer three major ways of accounting for morality as a social institution and for the human moral sense: as adaptive, as an evolutionary by-product, and as a product of culture rather than biological evolution.

Pope (2007:250) argues that each of the approaches, despite their shortcomings, can help Christian ethics to understand the important aspects of morality. The social establishment of morality probably arose to address certain fundamental human needs that are grounded in our cognitive, emotional and social abilities (Pope 2007:250). Pope (2007:250) is of the opinion that morality in itself did not evolve biologically, but some human ability to morality is evolutionary grounded.

#### 2.4.1.1 Morality as adaptable

Pope (2007:250) refers to Ruse and Wilson (1985:50) who argue that the “moral awareness of morality” is a biological adjustment “just like hands and feet” are. Morality contributes to the support of a stable and relatively trustworthy social order wherein individuals are more inclined to cooperate. With the passing of time, the internalisation of norms that counters explicit ways to promote self-interest, contributes to the individual’s fitness<sup>7</sup>. This applies to people who live in a relatively stable social order; in less stable contexts the optimal strategy may involve the aggressive exploitation of available opportunities.

Socio-biologists hold the view that it is in man’s self-interest to encourage ethics of self-sacrifice, responsibility and honesty because man benefits from living in communities where people act in such a manner (Pope 2007:251). Should morality be a system of “indirect reciprocation” those who encourage these values openly and especially those who believe it subjectively will be considered highly acceptable individuals. This view understands morality as essential to being human and specifically in the sense of the building up or carrying of humanness, that is to say as value in itself (“self-serving”). People are inclined to pass on certain judgements that help to send their genes to the succeeding generation (Pope 2007:251, compare Wright 1995:146, 147). According to Pope (2007:251), Ruse and Wilson (1985:50,52; see also Wright 1995:146, 146) is of the opinion that there can be no reason to assume that existing moral codes hold one or another truth lead by godly inspiration: “Morality, or more strictly, our belief in morality, is merely an adaptation put in place to further our reproductive ends. Hence the basis of ethics does not lie in God’s will ... [But rather it is] an illusion fobbed off on us by our genes to get us to cooperate.” Morality as an essential part of social and individual life can only function properly on condition that it maintains the illusion of objectivity.

Pope (2007:252) is of the opinion that this understanding of morality was developed by evolutionary psychologists in terms of their theory of “Machiavellian Intelligence”.

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<sup>7</sup> The term “fitness” refers to the individual’s survival and reproductive success (Pope 2007:251, with reference to Wilson 1998b:259 & 2004:155).

Behaviour is shaped by what is seen as the most attractive for people in relation to each other. By “advertising” themselves as trustworthy during reciprocal behaviour they invite others implicitly to engage in a relationship with them. According to Pope (2007:252) morality, according to this viewpoint, is a form of social control, a way in which individuals who live in a group monitor and control each other’s behaviour. Whereas laws control external behaviour, morality is internalised and produces a deep-rooted basis for social control. Morality is thus nothing more than a vehicle for subtle and often masked self-interest: “at least genotypical egoism if not crude ‘what’s-in-it-for-me’ selfishness” (Pope 2007:252).

Socio-biologists argue that self-interest is not only the basis of morality in general, but also of man’s dedication to specific moral standards. Morality is simply part of a general and flexible human behavioural programme (Pope 2007:252). Humans must cooperate to survive. This cooperation is in opposition to a basic behavioural tendency that evolved; the tendency to selfish behaviour that leads to social conflict.

Metaphysics and godly commands are, in the approach according to Pope (2007:253), not necessary for the functioning of morality. Darwin’s view of ethics confirms no transcendent basis for morality. There is no objective moral reality except for the requirements people lay on each other as members of a community who aims for a degree of collective order (Pope 2007:253). To say someone acted “immoral” admits that he or she harmed someone in an unjust manner. Usually the damage affects one or more people as individuals. It also damages the web of relationships in the community, even if it is in a subtle way.

Personal behaviour can only be understood by studying the specifications of personal history and the flow of experience (Pope 2007:254). To be human is not only to belong to the universal category of mankind. It also means to be a unique individual with a characteristic view and life story. Any explanation of the morality of a specific community must take the history of the community seriously. Human history cannot be successfully limited to natural history. The history of humankind is not only complex due to the multiplicity of factors that depends on it – such as economic, political, legalistic, linguistic, artistic, military or psycho-social – but also because these factors function concretely within the contingency plans of human choices (Pope 2007:255).

Evolutionary approaches to human behaviour can, at their best, offer a better grip on behavioural possibilities and innate tendencies. According to Pope (2007:255) specific choices are: “not mechanistically determined by the events and processes that precede them, so moral insight will always depend on grasping particularities rather than appealing to abstractions”.

#### 2.4.1.2 Morality as a by-product of evolutionary developed abilities

This alternative theory sees morality as a by-product of natural selection rather than a direct adjustment (Pope 2007:255); morality is dependent on man’s biological composition. Yet Pope (2007:255) refers to Ayala (1995:302) who argues that morality does not exist because it is adaptable in itself, but rather because it is the “indirect outcome of the evolution of important intellectual abilities”. He further argues that three abilities that evolved forms the basis of morality: “(i) the ability to anticipate the consequences of one’s own actions; (ii) the ability to make value judgments; and (iii) the ability to choose between alternative courses of action” (Ayala 1995:297). Morality and the ability to develop a “sense of morality” is grounded in the biological composition, the developed cognitive, social and emotional abilities of mankind. Yet it is only the indirect outcomes of the evolution of man’s intellectual abilities for provision, judgement and choice (Ayala 1995:302). Pope (2007:256) reacts by making the following comment:

This strongly nonreductive approach to morality employs the less deterministic notion of “basis” and acknowledges that something can be “supported by” (in the weak, nonreductive sense) an evolved base without itself having been directly “caused” (in the reductive sense) by that base.

According to Pope (2007:256) it seems as though Ayala’s emphasis of the cultural basis of morality is the opposite of Ruse’s standpoint. Nevertheless, his second ability, which serves as basis for morality, the ability to make value judgements, leaves the possibility open that evolutionary developed emotional and cognitive predispositions make man more inclined to adopt certain forms of behaviour like reciprocity. Yet it is difficult to believe that the powerful human tendency to believe and behave in terms of overarching normative frameworks is only a by-product of evolutionary powers

(Pope 2007:256). Pope (2007:256) refers to anthropologist William Irons (1991:67), who posits that morality originated because it leads to the formation of better and more united groups on the ground of indirect reciprocation. Of course the evolution of basic human cognitive and emotional abilities is a necessary condition for the occurrence of morality, but he further argues that “[t]he ought-generating ‘moral sense’ was selected in the environments of evolution because it helped its agents obtain their reproductive goals”. The fact that it is the reason why morality originally arose does not mean that it is the only remarkability of morality for us today (Pope 2007:256).

Morality is “natural”, but it is not “in the genes”, except in the sense that the abilities that allow morality is based on our biological composition (Pope 2007:256). The body functions in positive ways to support morality. The execution of altruistic actions can be accompanied by positive emotional conditions (“positive somatic markers”) that give expression to the cumulative preferences that we both receive and require (Damasio 1994:199; compare Pope 2007:257).

Pope (2007:257) is of the opinion that the “moral sense” should not be measured by the model of physiological urges like hunger and thirst. Evolutionary processes provide an emotional and cognitive construction that is characterised by general tendencies, desires or preferences and not a predetermined moral code (Pope 2007:257). Scholars that study human character understand these tendencies in terms of “prepared learning” or as tendencies that evolved to learn certain things easier than others (Pope 2007:257). Natural tendencies prepare people to show more loyalty towards their own group rather than another group, to reward those who cooperate with us, to punish those who counteract reciprocation and also to treat others in the same way we want to be treated. Life experience and cultural contexts can prevent or enable these tendencies to materialise.

Predispositions that developed evolutionarily always lead to man through a cultural lens. The flexibility of man’s “open programming”, that is man’s susceptibility for cultural influences, explains why man can and must expect such a variety of moral codes through history and cultures. “People are not ‘hard wired’ to observe polygamy, or monogamy, or polyandry” (Pope 2007:257).

#### 2.4.1.3 Morality as the product of culture

In the discussion of morality as the product of culture, Pope (2007:257) refers to the work of Rolston (1997-98) who tries to integrate evolutionary insights with the origin of human values. Here, a stronger observance of the cultural and historical basis of morality as in socio-biology is seen. Rolston is critical of an evolutionary view of the origin of values and is of the opinion that it is prone to ignore the insights of man's cultural experiences. With the aim to offer a theory of values that integrates both biology and culture, he argues that the creation and transference of human values comprises both genes and culture. Genes are necessary for the evolutionary development of the ability to pass value judgements, but genetics do not offer an adequate explanation of this ability or the values that are identified by it. Culture thus offers, as he puts it (Rolston 1999:xii, compare Pope 2007:258), "a second level of origin", which cannot be explained by genes.

Rolston's non-dualistic thesis rejects attempts like that of E.O. Wilson to explain culture with biology. Yet it also rejects the opposite tendency to deem all human values as totally independent of biology. The evolutionary development of man left people with a flexible set of cognitive powers (Pope 2007:258). Man has, according to Pope (2007:258) a "dual-inheritance" value system; there is a double origin for people's value systems. He is further of the opinion that the variety observed in the human population often leads to this "dual-inheritance" that depends on culture and ignores genes. This point is often, according to Pope (2007:258), missed by the rougher socio-biological perspective that suggests that morality as a genetic blueprint is part of human nature.

The core of Rolston's viewpoint is that morality, religion and science all depend on their own frameworks, but that they also transcend it (Pope 2007:258; compare Rolston 1999:161). This generalization resonates with Ayala and Damasio's view of the evolution of human intelligence that is increasingly empowered by developed abilities for culture, mentality and human intentionality. According to Pope (2007:258) these developed abilities enable the moral agent to use his or her biological abilities to think and react in ways that are not dictated and cannot be predicted by an analysis of biological or genetic factors.

In conclusion, Pope formulates a viewpoint regarding Christian ethics. One distinct difference between people and other animals can be found in the domain of morality. Pope (2007:259) refers to Rolston (1999:222) in the following comment: “Whereas some animals engage in pair bonding, mutual grooming, and other social behaviours, only human beings, Rolston argues, love others for their own sakes and have the ability to act as good Samaritans”. We are more prone to value the proper status of humanness if we admit that values are identified and carried out by the human mind. Together with this goes the admittance of the requirement, implanted in human nature, that we must live from an enlarged sense of identity that identifies with other people and takes into account man’s responsibility in the natural world.

According to Pope (2007:259) Christian ethics can benefit from the recognition of the functional value that morality offers without the presumption that morality is solely meaningful with regard to social functioning. The set of scientific hypotheses and insights regarding the “evolutionary basis of morality” does not render a religious interpretation impossible, including the notion that God orders the world by evolutionary processes (Pope 2007:264). Those who insist that human life should be understood in terms of nature rather than God, refers in a naive way to a simplistic anthropomorphic image of God. Such a god is an idol, a false god, a mere creature in the world (Pope 2007:264). The God of Christian ethics continually maintains the world in essence and orders it by the processes and patterns of nature. That is why it is, according (Pope 2007:264), theologically inappropriate to suggest that nature is ordered either by God or by evolutionary processes.

From a Christian ethical perspective, it is therefore wrong to motivate a choice for either a religious or biological basis (Pope 2007:265). It is true that the reductionist model, which supports an evolutionary basis for morality, is not acceptable for believers. Yet the “spiritual” view, that sees God rather than nature as the basis of morality, is just as suspicious. None of the two viewpoints leaves room for the possibility that God works through the intrinsic order of human nature.



Pope (2007:265) makes the following remark with regard to an approach to the origin of morality:

A chastened and balanced approach to the “evolutionary roots of morality” examined by scientifically informed sources is not only compatible with Christian ethics, but also helps to illumine the human nature that is divinely created, habituated in the moral life, denigrated by sin, and healed by grace. These theological claims are not and cannot be justified by evolutionary theory on its own terms, at least when it functions in the domain of science with its own proper standards and procedures. The fact that morality emerged as a result of evolution does not necessarily imply that it must be illusory.

In this type of theological allegation, claims are presented in religious faith and are not preferable by a blind faith, but rather a faith that sincerely values the insights in the “basis of morality” and accepts it humbly.

Pope (2007:267) concludes by mentioning that Christian ethics was always aware of the dominant human tendency of individuals to put their own interests above the interests of others and to be biased towards members of their own group and rationalise self-serving behaviour with morality. Human nature, as we experience it, is much more inclined to find expression in balanced reciprocation than in willingness “to give without expecting to receive”. Christian ethics preach ethic universalism – that every person is a neighbour. It seems as though the real lives of people, including churchgoers, is closer to the world, as described by socio-biology, than the world portrayed in the Sermon on the Mount (Pope 2007:267). Yet Christian ethics understand the foundation of immorality in religious rather than natural terms. Awareness of human fallibility emphasises the importance of transformation and self-discipline for the Christian way of living.

Pope is quite clear about his viewpoint that the origin of morality should not be explained either biologically or theologically. He motivates this with a perspective which combines evolutionary theory in a reliable way with theology. With such a perspective room can be left for the possibility that God works through the intrinsic order of human nature.

The viewpoint of John F. Haught, who also offers a theological perspective on the origin of morality, will be discussed next.

#### 2.4.2 John F. Haught

John F. Haught (1942- ) is a professor at Georgetown University. He specialises in systematic theology with a particular interest in cosmology, evolution and ecology. He has authored numerous books and articles, including *Science and Faith: A New Introduction* (2012), *Making Sense of Evolution: Darwin, God, and The Drama of Life* (2010), *God and the New Atheism: A Critical Response to Dawkins, Harris, and Hitchens* (2008), *Christianity and Science: Toward a Theology of Nature* (2007), *Purpose, Evolution and the Meaning of Life* (2004), *God After Darwin: A Theology of Evolution* (2000, 2<sup>nd</sup> ed. 2007), *Science and Religion: From Conflict to Conversation* (1995), *The Promise of Nature: Ecology and Cosmic Purpose* (1993, 2<sup>nd</sup> ed. 2004), *What is Religion?* (1990), *What is God?* (1986) and *The Cosmic Adventure: Science, Religion and the Quest for Purpose* (1984).

In the following discussion of Haught's perspective on the origin of morality the focus will mainly be on *Is Nature Enough? Meaning and Truth in the Age of Science* (2006).

Haught (2006:143) refers to Darwin who is of the opinion that in the struggle for survival some organisms win while others lose. This struggle for survival involves competition and the winners are those who adapt long enough to their environment to produce descendants. Should life continue for many generations, there must also be cooperation amongst members, even between different species. Evolution requires at least the same amount of cooperation as competition and even self-sacrifice. When an organism sacrifices its own reproductive opportunities for the benefit of its family, group or species, biologists refer to it as "altruism".

According to Haught (2006:143) altruism and self-sacrifice are generally seen as the highest expression of "morality" in the human sphere of life. Yet according to contemporary evolutionary thought, the origin of human "virtues" lies in the cooperation and altruism already occurring in pre-human forms of life. Some biologists

and social scientists see the origin of morality as the fascinating process by which genes are passed on from one generation to the next (Haught 2006:143, compare Wright 1994). Haught (2006:143) points to the fact that Darwin had no knowledge of genes and saw evolutionary selection as something that took place primarily on the individual level of organisms. Prominent evolutionary scholars are of the opinion that selection involves collections of genes that are shared by many members of a species (Haught 2006:144). By thinking of selection in terms of collections of genes, evolution is made, according to Haught (2006:144), statistically measurable and fulfil the quantitative requirements of science. Evolutionary “fitness” still means the possibility of reproductive success, but the success is more amongst collections of genes rather than individual organisms. It is, therefore, not as much the fittest individual organisms that survive, but rather the fittest set of genes.

Haught (2006:144) is of the opinion that “altruism” has a technical definition in today’s genetics-centred biology. It means to put your own genetic future at stake for the sake of the survival of the greater collection of genes that is shared with your relatives. In the older Darwinian perspective those unlucky individuals were seen as unfit. The genes that the individual shares with others can still be fit in the sense that they find their way to future generations. According to Haught (2006:144) it is known as “kin selection” which is a distinct form of individual selection and that makes inclusive rather than individual fitness possible.

Biologists who accept the idea of inclusive fitness can be tempted to come to the conclusion that there is no “true” moral bravery involved in self-sacrifice or human expressions of love (Haught 2006:145). Such a viewpoint is surprising because the ability to sacrifice oneself out of love for another is a quality that is associated with the highest virtue. According to Haught (2006:145), in theology there is insistence that the rarer forms of love require a special inflow of godly mercy. From a religious viewpoint, self-sacrificing love between people seems because it is uncommon. Yet it seems as if extraordinary brave behaviour amongst other mammals is natural, so why would it not be so in the case of human mammals (Haught 2006:145)?

Altruism and self-sacrifice seems to have originated much earlier in evolution than man. Something that looks like morality is visible in the reciprocal cooperation that

allows any specific species to exist over a long period of time (Haught 2006:145). Multiple examples of altruism and cooperation can be found in the animal kingdom. In each case the strive for genes that are carried over to the next generations is the “driving force” behind such seemingly virtuous behaviour (Haught 2006:145). It seems as though morality can now be explained in an authentic natural and physical way. Signs of altruism and cooperation are merely the visible expression of the need for genes to achieve reproductive success. Haught (2006:146) is of the opinion that science made it possible to see altruism and cooperative behaviour as neither virtuous nor sacrificing in any religious manner. They are merely the effect of laws of nature that we cannot see (Alexander 1979:38, compare Haught 2006:146).

There are, however, implications associated with such a viewpoint (Haught 2006:146). Ethics would not have to be grounded in theology should biology offer a more effective explanation for the origin and survival of moral instincts. In any case, moral ideals which lead people to cooperative behaviour do not reflect a Platonic heaven (Haught 2006:146). The whole idea of an eternal sphere of values is ultimately a cunning construction of human genes. Although we think of morality as partaking in the transcendent goodness of God, we can explain virtuous behaviour better by the fact that it is proven in general that ethical unrestricted behaviour is not adaptable. Cooperation, brave altruism and any tendency to moral behaviour among people is merely a natural result of a process introduced by “Darwinian-Mendelian” science (Haught 2006:146).

Haught (2006:146) aims to use the above-mentioned to come to the conclusion that the evolutionary naturalistic perspective sees morality as no longer dependant on religion and theology. He also attempts to point out that religion itself is a development of human genes. It is created ingeniously but purely to raise the moral codes which are essential to cooperation and survival. “Through its promises of reward and its threats of punishment religion has been serving the cause of gene survival all along, even religious and moral people have not been aware that this is what has really been going on” (Haught 2006:146). He is of the opinion that religions and theologies wrongly think that codes of conduct are given by God to people and are set in stone or placed in the hearts of people. Science paints a more convincing picture of where values

come from. Should altruism, the most prominent explanation of moral behaviour, turn out to be purely natural, so will all other virtues (Haight 2006:147).

For the ethically sincere person, it can feel as if they act self-sacrificially in the name of eternal virtues, but the evolutionary naturalists, according to Haight (2006:147), know that “[g]enes are manipulating the entire charade”. To be good makes one feel good and to feel good is essential in maintaining cooperative behaviour that leads to reproductive success. The ultimate basis for cooperative behaviour is purely natural rather than godly in origin. The point that Haight (2006:147) wants to make with this short overview of a naturalistic perspective is not to present the complexity in a biological explanation of ethical orientation. He merely illustrates how easily morality can be “naturalised” when it is only viewed from an evolutionary biological perspective. The starting point of naturalism is “nature is all there is”. From that flows the view that no godly command can be placed in the human mind and that no transcendent goodness can spur man to a self-sacrificial way of living. If theology is totally left out of the picture, there is no other explanation than a purely natural one for why most people are prone to strive to do good.

Haight (2006:148) asks if evolutionary biology can naturalise morality in full. He argues that an appropriate understanding of critical intelligence requires that, where human knowledge is concerned, one looks beyond the framework of naturalistic explanation. Haight (2006:148) makes the following remark with regard to critical intelligence: “If truthfulness means fidelity to the desire to know, then each of us must search for a habitat wide and deep enough to accommodate fully the mind’s imperatives to be open, intelligent and critical”. In his perspective on the origin of morality, Haight (2006:148) attempts to show that the naturalists’ own moral aspirations cannot be explained in full in naturalistic terms. Evolutionary explanations of the development of a sense of morality can nevertheless be of value on a secondary level. It can, however, not offer a definitive explanation for “goodness” and man’s attraction to “goodness”.

Haught (2006:149) continues to discuss morality and critical intelligence and makes the following comment:

My first point is this: the naturalist's own implicit appeal to lofty ethical principles, including what has been called the "ethic of knowledge," is enough to refute logically the claim that gene-centered evolutionary biology – or for that matter any other purely naturalistic account – can lead us to the ultimate ground of all human moral aspiration and conduct. Most scientific naturalists adhere passionately to certain values whose power to motivate would be immediately deflated if their own naturalistic accounts of the origin of virtue were applied to these values.

In the explanation of the above-mentioned point, Haught (2006:148) refers to a specific imperative on a cognitive level, namely "to be responsible". This fourth<sup>8</sup> imperative of the mind, experienced by all of us, forms the foundation of all morality and ethics; it leads to the cognitive execution of choice. Haught (2006:150) is of the opinion that naturalists will attempt to show that the imperative to be responsible can be explained in pure scientific and Darwinian terms. Yet Haught (2006:50) considers a fuller understanding of critical intelligence necessary and he explains it as follows:

- (1) Be attentive! → experience
- (2) Be intelligent! → understanding
- (3) Be critical! → judgment
- (4) Be responsible! → decision<sup>9</sup>

Each of the four cognitive functions is distinctly different, but the distinction is complimentary to their functionality. Each of the mind's imperatives leads to a qualitative distinctive cognitive action while still supporting the others. With reference to the current discussion of morality, it means that by being responsible the quality and

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<sup>8</sup> Haught refers to four imperatives or levels of cognition of which the fourth, responsibility and choice, is of importance in his discussion of morality. With regard to the first three Haught (2006:33) makes the following comment: "You may never have noticed it before, but your mind cannot help passing through the three distinct but complementary acts: experience, understanding and judgment."

<sup>9</sup> Haught uses the work of Lonergan (1976:221-39) in his interpretation and discussion of cognitive levels.

depth of cognition is enhanced (Haight 2006:150). It is in other words irresponsible to make uninformed ethical decisions. Man cannot truly be attentive, intelligent and critical without being responsible. A virtuous life is the outcome of proper cognition (Haight 2006:150). For example, the humbler a person is, the more they are prone to keep up a front of knowledge and will. So too, the more altruistic a person is, the more they are inclined to be open to cognitive judgements of others. The need “to know” is truly set free when it flows from a subject whose characters are shaped by a deep sense of the “good”.

Haight (2006:157) is of the opinion that there is another reason why the naturalistic view of ethics in terms of evolution is inadequate. The reason is that such an explanation of ethics does not carefully distinguish between the different levels of moral development. “Morality” can refer to a wide variety of attitudes that differs remarkably from one another during different stadiums of personal growth from childhood to adulthood (Haight 2006:157). The Darwinian explanation always leads to the same conclusion: either genes try to be carried on to the next generation, or some physical mechanism is the motivation that encourages people to act morally. According to Haight (2006:157) it is possible to distinguish between different degrees of moral maturity. There are three stadia: pre-conventional, conventional and post-conventional<sup>10</sup>. These stadia are not meant to be precise and unalterable, but are useful general indications that individuals can gradually become more refined in their moral differentiation.

Haight (2006:158) is of the opinion that should moral development be possible, the evolutionary scholars would be compelled “to nuance any naturalistic theory of human morality in such a way as to explain the differences and not just the continuities that are characteristic of each stage in the developmental process”. The following refers to Haight’s (2006:158-161) discussion of the three phases.

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<sup>10</sup> Haight bases his typology on ideas developed by James W. Fowler in Fowler, J.W. 1981. *Stages of Faith: The Psychology of Human Development and the Quest for Meaning*. San Francisco: Harper & Row; and Barnes, M. 2000., *Stages of Thought: The Coevolution of Religious Thought and Science*. New York: University Press.

The “pre-conventional” phase is the most primitive phase wherein human behaviour is formed by an awareness of reward and punishment. In this stage the moral subject has little or no idea what is later evident as universally and unconditionally “good”. The motivation behind behaviour is fear of punishment if an individual disobeys a certain imperative and the expectation of belonging if an individual is obedient. In this stage behaviour is regulated by either a desire of approval or a deliberate avoidance of pain. This level of ethical awareness is typical of very young children and psychologically underdeveloped adolescents and adults. It is, however, possible that all people carry traces of moral immaturity in themselves.

It is necessary to observe that religious development can take place parallel to moral development. Correspondingly, people whose moral lives get stuck at reward and punishment, can think of God as the primary source of laws that have to be followed to avoid hell and receive paradise. Oftentimes people who outgrow the most primitive phase of moral awareness become sceptical about the existence of God. Scientific naturalists will often reject the idea of God, not only due to a seeming lack of “evidence”, but also due to what they see as religion’s close connection to a childlike level of moral development. Haught (2006:159) is of the opinion that it is necessary to consider that evolutionary science can offer an explanation for the earliest stadia of a normal person’s moral growth. The desire for approval and the aversion to pain is certainly adaptable attributes without which human genes could never survive. Although the idea of evolutionary adaptability can offer an adequate explanation for pre-conventional morality, it is, however, unable to explain the later, more mature stadia of moral awareness.

A second phase of moral development – “conventional” morality – is based on a natural yearning to be accepted by some social group. This group can consist of, amongst others, an individual’s family, friends, a political party or a church community. It seems as if the natural need to belong, a characteristic of almost all living species, forms human behaviour. It may also seem as if this level of moral development permits a pure biological interpretation like inclusive fitness or reciprocal altruism. The ethical behaviour people adopt is related to that which enables man to survive in cooperative environments that enhance the overall possibilities for successful genetic duplication (Haught 2006:159). From an individual experience, conventional morality permits



individuals to live comfortably with others that fulfil their need to be part of something bigger than man himself. A genetic perspective sheds light on the fact that conventional morality is only one of many cunning ways for genes to be carried to future generations.

On a conventional level, reward and punishment is no longer enough motivation for individuals. It is more probably the need for a healthy self-image that connects the individual to the group and requires appropriate behaviour. An individual's moral life will largely consist of the internalisation of the group's mentality and behavioural patterns. According to Haight (2006:160) it is possible that most people always stay stuck at the conventional phase of moral development. Yet the cooperation that is required involves a degree of sacrifice. Conventional morality requires that man should give up his personal differences and social instincts in order to belong to corporative organisations. A certain degree of intentional self-sacrifice is often required as a condition to membership of a specific social community. According to Haight (2006:160) we can consider ourselves extremely "moral" due to our self-sacrifice for the sake of the group. Evolutionary psychologists view this self-sacrifice as completely comprehensible in terms of the survival of genes, kin selection and reciprocal altruism which leads to cooperative behaviour in other species. There is nothing brave about self-sacrificial behaviour, because genes are the true agents of altruistic behaviour which is shared by many members of a group. Conventional morality, like pre-conventional morality, can, therefore be comprehensible to a degree from an evolutionary perspective.

Haight (2006:160) is of the opinion that religion can also be blended with conventional morality in such a way that it sometimes becomes difficult to distinguish between the two. Conventional morality is inclined to justify ethical content with religious authority. "The idea of 'God' may imbue the historically contingent moral precepts operative in a social unit with an eternal validity that renders the precepts seemingly unquestionable" (Haight 2006:161). In light of this conventional invocation of ideas about God it is appealing to claim that religious convictions can also be explained in full in a naturalistic manner. Yet, conventional morality cannot be explained only by evolution, mainly because morality can easily lead in the direction of genetic homogeneity. The wide range of survival and ambition of genetic lines, which an evolutionary perspective

prescribes, is thus not present. There is, according to Haught (2006:161), a more exceptional level of moral and religious development that cannot be accounted for in full by a naturalistic explanation.

The third level of moral development is known as the post-conventional phase. Behaviour in this phase is formed by the expectation of and reaction to that which is seen as a real but incomprehensible sphere of goodness. It originates from the belief that a specific set of actions is fundamentally and unconditionally “good”, regardless of the consequences for the individual or group. Obedience to such a form of “goodness” can result in social unrest. Our mind’s fourth imperative – to be responsible – is only possible because a sphere of unspoilt and pure values already exists. It is a sphere, outside the domain of conventional moral agreement, that invites us to unswerving dedication. The moral subject does not possess this “goodness”, but is in expectation of it, in such a way that it seems as if the subject is possessed by it.

It is difficult to maintain a post-conventional attitude because the pressure to conform is very high (Haught 2006:162). Yet there are rare cases of individuals who can maintain such a level of moral development. Their level of moral and religious interest, should they be religious, goes beyond the conventional and pre-conventional style of devotion. The idea of God accordingly plays a distinctive role in each level of moral development (Haught 2006:164). For pre-conventional morality God is the sanctifier of the status quo. Post-conventional morality sees God as the vague expectant mystery of goodness that calls man to transcend the other two levels of morality. It is, according to Haught (2006:164), obvious that the most innovative figures in the history of ethics and religion were post-conventional, but their ideals were questioned by the more conventional types. It is also clear that religious and ethical traditions, which were originally built on the ideals of great prophetic figures, can be reduced to conventional and even pre-conventional additions.

Haught (2006:166) comes to the conclusion that moral aspirations, as grounded in the fourth imperative, is one of many forms of cosmic origin. Origin can, according to Haught (2006:166), not be clearly separated from a worldview where anticipation is not seen as fundamental. Ultimately, it is the expectation of an absolute goodness that lures the mind to act on the imperative to be responsible, just as the expectation of a

fulfilment of the truth activates the desire to know. The core of intelligence, life, origin, evolution, cosmic processes and now also morality is seen as anticipating. It means they make total sense only in terms of a worldview wherein nature is attracted, on all levels, to an unending horizon of mystery that stays hidden from any comprehension.

Evolutionary and other scientific declarations should be part of any appropriate understanding of morality. These declarations cannot function as an ultimate explanation without challenging the whole naturalistic project (Haught 2006:166). The project itself is inseparable from the naturalists' own dutifulness to the imperative to be responsible. Here responsibility means obedience to ethics of knowledge that sees scientific, objective and theoretical knowledge as an unconditional norm. Naturalism can, therefore, not lead an intelligent and responsible subject to any certain foundation for either intelligence or responsibility.

Haught is clear about his standpoint on whether or not a pure evolutionary naturalistic explanation can be given for the origin of morality. Although a naturalistic perspective is highly valuable, it is still inadequate. Haught prefers to link the origin of morality to the three levels of moral development. A specific view of God on each level plays a forming role in the individual's development. According to Haught, man's sense of morality depends on the cognitive level – to be responsible. A suitable foundation for the imperative and thus, morality, is only possible from a perspective on reality that takes a theological understanding seriously.

## **2.5 SUMMARY**

The perspectives of the scholars in the different fields play an essential role in the investigation into and the understanding of the origin of morality. An overview on the modern discourse about the origin of morality demonstrates the necessity of combining different perspectives, as no single perspective offers a comprehensive explanation of the origin of morality. It is only when this is done that the origin of morality will be better understood.

Wilson is of the opinion that philosophy, the humanities and religion do not determine the origin of morality, but that natural sciences (especially biology) play an important

role, since altruism and empathy are explained by neurobiological science. According to Wilson, altruism does not originate from kin selection, but from selection in group context and is, therefore, based on the biological instinct to promote the general wellbeing of the group. Coyne<sup>11</sup> (2013:32) points out a problem with Wilson's point of view when he notes that:

Most biologists have rejected group selection for two reasons: it doesn't work well in principle, and, more important, there's no evidence that it has been of any significance in evolution. For an obvious reason, selection among groups is far less efficient than selection among genes: genes replicate and replace other genes much faster than groups of individuals divide and replace other groups.

Nonetheless, Wilson's use of neurobiological sciences to explain empathy and altruism plays a significant role in determining the origin of morality.

From a philosophical perspective, Joyce emphasises the important role of moral judgement in reciprocal and cooperative behaviour. This does not imply that human beings are inherently and unconditionally cooperative; moral consciousness does not equate to habitually judging co-operative behaviour as morally good. According to Joyce, natural selection enables human beings to interact socially, participate in cooperative exchange, love, show empathy and be altruistic. Natural selection, therefore, designed human beings to think of human relations in moral terms. Joyce suggests that morality is unique in that it mainly addresses interpersonal relationships and is associated with emotions like guilt or the human moral consciousness. Although moral judgement expresses certain human perspectives, they are also accusations. According to Joyce, morality is a combination of authority and inevitability; no one can escape or deny it.

Interestingly, Joyce rejects universalism. He considers morality an inherent battle against excessive individualism and moral judgement as a certain standard. He does,

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<sup>11</sup> Jerry A. Coyne is a professor in the Department of Ecology and Evolution at the University of Chicago. He is a member of *The Committee on Genetics* and *The Committee on Evolutionary Biology*.

however, oppose the idea that moral judgement must be expressed in universal terms. Joyce notes that there are various societies with value systems that we do not hesitate to consider moral, even if it leads to specific judgements that differ from ours. He further argues that morality is limited to language users. This contrasts with the opinion of Frans de Waal and other scholars of evolutionary biology, who have detected signs of morality in, amongst others, chimpanzees. Whether we consider chimpanzees beings with moral consciousness or not, it is clear that obtaining sophisticated language transforms the nature of moral judgement and allows for the explicit requirement of moral standards.

The second philosophical perspective on morality is that of Maxine Sheets-Johnstone, who suggests that universal morality is built on universal foundations; it has to be logically deduced from what is pan-cultural. Identifying the pan-cultural does not entail gaining clarity on the universal principals or moral thought and actions that appear to be present in all cultures. Sheets-Johnstone is of the opinion that morality is the expression of our natural abilities as social beings.

Sheets-Johnstone's perspective of evolutionary ethics does not attempt to reduce our moral lives to a biological level or instrumental-political considerations about how we should reconcile our limited natural resources with our unlimited human desires. Instead, Sheets-Johnstone acknowledges the role of biology and argues that true evolutionary ethics should be living ethics that are grounded in the biological truths of daily life. It has to be based on human nature and the characteristics that humans share with animals, like making sense of situations, learning and understanding the inter-corporeal. These characteristics have a general evolutionary origin and allows Sheets-Johnstone to see continuity between humans and non-human animals.

According to Sheets-Johnstone, a thorough investigation into the origin of morality cannot start with a disconnected theoretical standpoint. Like Frans de Waal, she emphasises a bottom-up approach to the origin of morality, that starts with experience.

From a theological perspective, Pope argues that Christian ethics can benefit from evolutionary theories when considering the origin of morality. He suggests that evolutionary sciences offer three main ways for human consciousness to view morality

as a social institution. It can be viewed as adaptable, an evolutionary by-product and a product of culture. Each approach does, however, have its shortcomings which should not be ignored. Pope makes an important remark when he claims that the scientific perspectives of the origin of morality do not make religious interpretations thereof impossible, but rather creates opportunities for a specific understanding of God's management of the world through evolutionary processes.

Like Pope, Haught emphasises the important contribution of the natural sciences to the origin of morality, but notes that it alone cannot explain the origin of morality. Evolutionary explanations of the development of morality are of value on a secondary level, but cannot offer a definite explanation for "goodness" and the human attraction to it. Haught defines altruism as the process during which one endangers one's genetic future for the sake of the survival of the bigger group of genes that is shared with relatives.

According to Haught, moral development is not a once-off process, but a multi-levelled one. The third, or post-conventional level of moral and religious development cannot be fully explained with a naturalistic approach. In this phase, behaviour is developed by expectation and reaction to what is considered the ideal sphere of goodness. This originated mainly from the conviction that a specific set of actions are fundamentally and unconditionally "good", regardless of their effects on the individual or the group. Haught emphasises the role of the specific perspective of God on each level. An accurate basis of morality will, according to Haught, include natural sciences and theology.

According to Pope, God cannot be excluded from our understanding of human life. Such an understanding, that will focus only on nature, will lead to a simplified and anthropomorphical perception of God. Pope notes that the God of Christian ethics constantly maintains the world and the processes and patterns of nature. It is, therefore, theologically unacceptable to claim that nature is solely organised by God or evolutionary processes.

This chapter offers a thorough overview on the modern discourse about the origin of morality. It sheds light on the importance of combining different perspectives in the

studying of the origin of morality. In the following chapter the study will continue with an in-depth investigation of the evolutionary biological perspective on the origin of morality, as provided by Frans de Waal.

## CHAPTER 3

# FRANS DE WAAL'S PERSPECTIVE ON THE ORIGIN OF MORALITY

### 3.1 INTRODUCTION

Frans de Waal is a German primatologist known for his work on the behaviour and social intelligence of primates. His first book, *Chimpanzee Politics* (1982), of which an anniversary edition was published in 2007, compares the underhand scheming of chimpanzees involved in power struggles to that of human politicians. Ever since, De Waal has drawn parallels between primate and human behaviour, from peace-making and morality to culture. His scientific work has been published in many technical articles in journals such as *Science*, *Nature*, *Scientific American* and journals specializing in animal behaviour. De Waal is also editor and co-editor of nine scientific volumes. His seven most well-known books – translated into more than twelve languages – have made him one of the world's most visible primatologists. De Waal is C.H. Candler Professor in the Psychology Department of Emory University and Director of the Living Links Centre at the Yerkes National Primate Centre, in Atlanta, Georgia. He has been elected to the National Academy of Sciences (U.S.) and the Royal Dutch Academy of Sciences. In this section De Waal's standpoint concerning the origin of morality will be discussed.

According to De Waal et al (2014a:137) there has been renewed interest in the evolutionary approaches to morality in the past decade. In the 1970s and 1980s morality and evolution was seen as irreconcilable. A current viewpoint is that morality possibly has and requires an evolutionary explanation (De Waal et al. 2014a:137).

In his book *Good natured: The origins of right and wrong in humans and other animals*, (1996:10) De Waal mentions the need of a biological perspective on morality. He sees social acceptance as a central aspect of human morality. Social acceptance is based



on what the individual should and should not do to be seen as worthy by the community. In the words of de Waal (1996:10),

Immoral conduct makes us outcasts, either here and now or – in the beliefs of some people – when we are turned away from the gates of heaven. Universally, human communities are moral communities; a morally neutral existence is as impossible for us as a completely solitary existence ... Human morality may indeed be an extension of general primate patterns of social integration, and of the adjustment required for each member in order to fit in.

In the investigation into the origin of morality, a characteristic of human society, De Waal (2006:6) notes that a parallel debate arises that sets reason against emotion. One school of thought regards morality as cultural innovation that can only be achieved by the human race. According to this school moral tendency is not seen as part of human nature and our forefathers was moral by choice. This standpoint accepts that humans are not really moral and considers morality a type of cultural covering over an otherwise selfish nature. Until recently, this was seen as the dominant approach to morality.

In contrast, the second school sees morality as the direct consequence of social instincts humans share with other animals (De Waal 2006:6). Morality is neither uniquely human nor a conscious decision taken in a specific time. According to this school morality is a product of social evolution.

De Waal (2006:7) builds on a previous thesis (1996) by specifically focusing on behaviour of non-human primates to explain why he sees the building blocks of morality as evolutionary grounded.

The role of selfishness in evolution is a matter of concern which is often interpreted wrongly. De Waal (2006:13) states the following:

It is only recently that the concept of “selfishness” has been plucked from the English language. Robbed from its vernacular meaning, and applied outside of the psychological domain. Even though the term is seen by some as synonymous with self-serving, English does have different terms for a reason. Selfishness implies the *intention* to serve oneself, hence knowledge of what one stands to gain from a

particular behaviour ... Unfortunately, in complete violation of the term's original meaning, it is precisely this empty sense of "selfish" that has come to dominate debates about human nature.

Animals and humans can be described as the product of evolutionary forces that encourage self-interest. Yet one should keep in mind that this self-interest in no way prevents the evolution of altruistic and sympathetic tendencies. De Waal (2006:14) refers to Darwin, who acknowledges this in full and also explains the evolution of these tendencies with the help of group selection rather than individual selection.

Darwin is convinced that his theory accommodates the origin of morality. Even in the moral sphere Darwin emphasises the continuity of the human race with animals rather than the viewpoint that the human race falls outside the laws of biology (Darwin 1982 [1871]:71-72):

Any animal whatever, endowed with well-marked social instincts, the parental and filial affections being here included, would inevitably acquire a moral sense or conscience, as soon as its intellectual powers had become as well developed, or nearly as well developed, as in man.

According to De Waal (2006:14), the necessity of the capability to sympathise, which is emphasised by Darwin, must be acknowledged. Darwin (1982 [1871]:77) states that many animals sympathise with one another's fears and worries. It is particularly in this area that there is distinctive continuity between humans and other social animals. To be instantly affected by the emotions of others has to be very basic, for this reaction is present with a great variety of animals, often immediately and uncontrolled (De Waal 2006:14). This behaviour likely originated in parental care where defenceless individuals have to be fed and protected. Yet, with animals, it extends beyond relations between unrelated adults.

Darwin, in this viewpoint of sympathy, is inspired by the Scottish moral philosopher, Adam Smith (1937 [1759]:9), who notes the following:

How selfish so ever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it, except the pleasure of seeing it.

The evolutionary origin of this phenomenon is nevertheless no mystery according to De Waal (2006:15). All species that depend on cooperation – from elephants to wolves and humans – show group loyalty and tendencies to help one another. These tendencies cultivate an interwoven social world where they help or do something to benefit family members and companions who have the capability to return the favour. The initiative to help is never without the survival value for the party who demonstrates the initiative. Yet, this initiative is often separated from the consequences which form the evolution thereof. Here the division between the altruism of animals and humans gets smaller (De Waal 2006:15, compare Wilson 1975:562).

De Waal (2006:16) deems it unnecessary to explain the origin of cooperative tendencies with group selection. It seems as though family selection and mutual altruism are relatively successful. He refers to the high occurrence of intergroup migration under non-human primates which does not correspond to the conditions of group selection. In all primates the younger of any generation tends to leave the group to engage with other groups (De Waal 2006:16, compare Pusey and Packer 1987). Primate groups are thus not genetically isolated and group selection is not possible.

In the discussion of the basis of morality, De Waal (2006:16) sees the underlying capacities as far more important than the actual behaviour. For instance, rather than to argue that the part of food is a building block of morality, it is rather the capacities underlying sharing (amongst other things high tolerance, sensitivity to others' needs, mutual exchange) which is relevant. Ants also share food, but based on different instincts from those that make humans and chimpanzees share (De Waal 1989).

Darwin understands this distinction and looks beyond the behaviour at the underlying emotions, intentions and capacities. In other words, whether animals treat one another nicely or not is not the issue. It is also not important whether their behaviour fits into the moral preference of humans or not. The relevant question is rather if they have the capacity for reciprocity and revenge, for the implementing of social rules, for the settlement of disputes and for sympathy and empathy (De Waal 2006:16, compare Flack & De Waal 2000).

It also means that requests to discard Darwin in our daily lives or to build a moral community is based on a misconception of Darwin. Darwin considers morality an evolutionary product and has a more liveable world in mind than that of Huxley and his followers who believe in a culture-driven, artificial morality which does not receive any help from human nature. Huxley's world is by far the colder, more daunting place (De Waal 2006:17).

De Waal (2006:17) refers to Edward Westermarck, who plays a central role in any debate about the origin of morality. Westermarck was one of the first scholars who encouraged an integrated approach that studied both humans and animals and both culture and evolution. Westermarck emphasises the central role of emotions in morality. "People can reason and deliberate as much as they want, but, as neuroscientists have found, if there are no emotions attached to the various options in front of them, they will never reach a decision or conviction" (Damasio 1994). With regard to moral choice, emotion and decision making is essential because morality entails strong decision making, which is not the result of rationality. Moral decision making requires caring for others and intense "gut feelings" about right and wrong (De Waal 2006:18).

The most enlightening part of Westermarck's work is where he tries to determine what defines a moral emotion as moral (De Waal 2006:20). He points out that such emotions are more than "Raw Gut Feelings" and explains that these emotions differ from "kindred non-moral" emotions by their "disinterestedness, apparent impartiality, and flavour of generality" (Westermarck 1917 [1908]:738-39). Emotions such as gratitude and resentment are directly linked to the individual's own interests – how the individual is treated or wants to be treated – thus these emotions are too egocentric to be moral. Moral emotions should not be connected to an individual's immediate situation. On a more abstract level, moral emotions handle issues of good and bad. "It is only when we make general judgements of how anyone ought to be treated that we can begin to speak of moral approval and disapproval" (De Waal 2006:20).

Empathy and mutual behaviour is seen as the chief prerequisite or building block of morality (Flack & De Waal 2000). They cannot produce morality, yet they are essential components thereof. No moral society can be imagined without mutual exchange and

emotional interest in others. It provides a concrete starting point to study the continuity Darwin had in mind. The debate around the first school of thought or “Veneer Theory” (see De Waal 2006:7-12) is fundamental to this investigation because some evolutionary biologists differ strongly from the idea of continuity. They presented morality as pretence, so complex that only species – the human race – had the capability to be moral. This viewpoint has no ground and prevents a full understanding of how we became moral. De Waal (2006:21) attempts to show the contrary with true empirical data.

De Waal (2006:3-52) emphasises the great contrast between the two schools of thought around human goodness. The one school sees people as essentially evil and selfish and morality as only a cultural covering. According to De Waal (2006:52) this school, personified by Huxley, is still present and there is a lack of explanation about how we moved from amoral animals to moral beings. The theory clashes with evidence of emotional processing as driving force behind moral judgement. “If human morality could truly be reduced to calculations and reasoning, we would come close to being psychopaths, who indeed do not mean to be kind when they act kindly” (De Waal 2006:52). De Waal creates a strong contrast between the above-mentioned and the alternative school of thought, which tries to ground morality in human nature.

The alternative school of thought sees the origin of morality as naturally developing in our species and believes there are sound evolutionary reasons for the qualities that are involved. Yet, the theoretical framework by which the transition from social animal to moral human is explained is incomplete. The theory’s foundation is kin selection and mutual altruism, but it is clear that other elements should be added. De Waal (2006:53) sees the evolutionary pressure responsible for our moral tendencies as not necessarily entirely positive: “After all, morality is very much an in-group phenomenon”. Universally, people treat outsiders worse than members of their own society. Morality may have evolved as an in-group phenomenon in collaboration with other typically in-group qualities such as conflict resolution, cooperation and sharing.

A person’s first loyalty is not towards the group, but towards the individual and their relatives. With growing social integration and dependence on cooperation, shared interests came to the foreground so that society as a whole became the focus. “The

biggest step in the evolution of human morality was the move from interpersonal relations to a focus on the greater good” (De Waal 2006:54). We can observe traces of this in apes when they restore relationships with others and promote peace. De Waal (1996) regards such behaviour as a reflection of societal interest which, in turn, reflects what is important to each group member in a cooperative atmosphere. Most individuals have much at stake should a community disintegrate, hence the interest in the society’s integrity and harmony.

Naturally, the most powerful force behind a sense of community is animosity against outsiders. “In the course of human evolution, out-group hostility enhanced in-group solidarity to the point that morality emerged” (De Waal 2006:54). Instead of merely palliative relationships around us, as is the case in apes, we have explicit teachings about the value of the community and the precedence it takes, or should take, above individual interests. People take this more seriously than apes and that is why we have moral systems and apes do not. “And so, the profound irony is that our noblest achievement – morality, has evolutionary ties to our basest behaviour – warfare” (De Waal 2006:55).

Should we accept the viewpoint that morality developed through an evolutionary process and we therefore see morality as a logical outcome of collaboration, then we are not going against our own nature when we develop a moral attitude of caring. Moral attitudes are with us from the beginning; we are neither hypocritical nor deceive people when we behave morally. We make decisions which flow from our social instincts, older than our species, even if we add the uniquely human complexity of impartial concern for others and society as a whole (De Waal 2006:55).

De Waal (2006:55) further emphasises the re-evaluation of the role of rationality in moral judgement. He refers to Haidt (2001), successor of Hume (1985 [1739]), who argues that most human justification which looks *post hoc*, that is after moral judgement, is based on quick and automatic intuitions. The first school of thought, which focuses on human uniqueness, suggests that moral problem-solving is due to recent evolutionary extensions to our brain, such the prefrontal cortex, while neurological tests show that moral judgement comprises a variety of brain areas, some of which are extremely antique (Greene and Haidt 2002, compare De Waal 2006:56).

In short, it seems that neuroscience supports the viewpoint that human morality is evolutionary and anchored in the sociality of mammals.

Additional support for an intuitive approach to morality comes from child research. We are aware that children understand the difference between moral principles (“do not steal”) and cultural conventions (“no pyjamas at school”) from an early age (De Waal 2006:57). Their behaviour is not solely based on reward and punishment and they develop a moral perspective shortly after the age of one by interacting with other members of their species.

De Waal’s (2006:57) personal argument centres around the continuity between human social instincts and those of our closest related species, the apes: “but I feel that we are standing at the threshold of a much larger shift in theorizing that will end up positioning morality firmly within the emotional core of human nature. Humane thinking is making a major comeback”.

The study of De Waal’s view on the origin of morality proceeds by drawing attention to a few critical focus points in his work. These focus points include his perspective on the origin of empathy, the “is” and “ought” distinction, De Waal’s tower of morality, as well as his bottom-up view of morality.

### **3.2 EMPATHY**

According to Darwin (see De Waal 2005a:248), “[a]ny animal whatever, endowed with well-marked social instincts... would inevitably acquire a moral sense or conscience, as soon as its intellectual powers had become as well developed, or nearly as well developed, as in man”. Animals helping one another is not a new observation. In his publication, *Our Inner Ape*, De Waal (2005a:250) asks the following question: “If all that matters is survival of the fittest, shouldn’t animals refrain from anything that fails to benefit themselves? Why help another get ahead?” He goes on to say that there are two main theories in this regard. Firstly, such behaviour has evolved in order to help genetically related individuals, which results in the promotion of the helper’s own gene. A second theory states that animals engage in helping behaviour for the sake of mutual aid. Both parties stand to gain if animals help those who return the favour.

According to De Waal (2005a:251) both theories involve the evolution of behaviour, but the actual motives remain unclear. Motives sprout from the present, whereas evolution is dependent on the success of a trait over many years.

Even though altruistic behaviour is common in humans and other social animals, De Waal (2005a:252) still argues that the sources of altruistic tendencies are mutuality and the helping of kin. In early human societies, aiming at family and potential reciprocators, “survival of the kindest” played a remarkable role (De Wall 2005a:253). With time, sympathetic behaviour towards others became an objective; a vital aspect of religion and the core of human morality. By encouraging us to engage in neighbourly love, feeding the poor and so forth, Christianity as religion enforces kindness, which is already part of our humanity (De Waal 2005a:253). Religions are thus merely emphasizing established capacities.

In the debate concerning the origin of empathy, De Waal (2006:21) states that psychologists and biologists often differ in opinion: “Psychologists sometimes put our most advanced traits on a pedestal, ignoring or even denying simpler antecedents”. Biologists, however, prefer bottom-up accounts over top-down, whilst undeniably leaving room for the latter (De Waal 2006:23). Processes at the base are modified by higher order processes once they have come into existence. For example, culture and language shape expressions of empathy. According to De Waal (2006:24) the distinction between “shaping” and “being the origin of” is fundamental. That being said, De Waal (2006:24) argues that “empathy is the original, pre-linguistic form of inter-individual linkage that only secondarily has come under the influence of language and culture”. Bottom-up accounts, therefore, assume continuity between past and present, human and animal, child and adult, and even between humans and the most primitive mammals (De Waal 2006:24).

Empathetic behaviour is second nature to people and anyone lacking such behaviour is often considered dangerous. De Waal (2005a:257) describes empathy as “[a]t its simplest ... the ability to be affected by the state of another individual or creature.” It is essential to social animals to coordinate action and movement, communicate about water and food, assist those in need and communally respond to danger. According to De Waal (2006:25) ample evidence exists of one primate coming to another’s relief



during a fight, emotional responses to the distress of others, or putting an arm around a previous victim of attack. It is a widely held view that almost all communication among non-human primates are emotionally facilitated (De Waal 2006:25).

### 3.2.1 Emotional Contagion

Empathy can be expressed in a number of ways. One of these ways is the ability to be affected by the state of another creature in body movement, such as when we mimic the behaviour of others (De Waal 2005a:257). Bodily identification, as De Waal (2005a:258) identifies the phenomenon, is common in animals. Apes, for example, yawn while watching a video of a yawning ape and monkeys scratch themselves if they see another do so. Humans do the same and often not only in relation to our own kind. According to De Waal (2005a:259) social animals relate to one another on a very basic level. They are hardwired to connect and emotionally resonate with those they are surrounded by. Whilst watching photographs of facial expressions, people involuntarily copy the expressions observed. It is a fully automated process; our facial muscles echo the expressions even though we are not aware of it.

De Waal (2005a:260) states that simple forms of relating to others exist in all sorts of animals, since imitation and empathy require neither language nor consciousness. As an example, De Waal (2005a:260) refers to a classic experiment, not performed by him due to ethical reasons. One monkey stopped responding for five days and another monkey for twelve days after observing a companion being shocked each time they pulled the lever to get food for themselves. To avoid inflicting pain on others, these monkeys literally starved themselves. The probable explanation in such studies is distress caused by another's distress and not concern about another's welfare (De Waal 2005a:260). There is enormous survival value in responses like these. By observing fear and distress of others, there is good reason for one to also be alert. This is one of the reasons why panic spreads so easily among people.

We have been programmed to carefully dislike hearing and seeing the pain of others (De Waal 2005a:260). Emotions have the tendency to arouse matching emotions, as can be seen in a room full of crying toddlers. The development of empathy begins in a similar way, as a toddler being overwhelmed by the emotions shown by other

toddlers. De Waal (2005a:261) states that emotional contagion resides in parts of the brain so ancient that humans share them with animals as diverse as dogs, rats, monkeys and elephants.

Even if such emotional contagion is undoubtedly a basic phenomenon, there is much more to it than one individual being merely affected by another's state (De Waal 2006:26). Two individuals often will engage in indirect interaction. Put differently, emotional and motivational states often become noticeable in behaviour explicitly directed at another individual. The emotional effect on the other individual is actively sought and not just a by-product (De Waal 2006:26). Emotional contagion develops into empathy with increasing differentiation between self and other, as well as an increasing appreciation of the precise circumstances underlying the emotional states of other individuals. De Waal (2006:26) makes the following remark in this regard: "Empathy encompasses – and could not possibly have arisen without – emotional contagion, but it goes beyond it in that it places filters between the other's and one's own state". Humans start to add these cognitive layers around the age of two.

### 3.2.2 Sympathy and Personal Distress

Sympathy and personal distress are two mechanisms related to empathy, which are each other's opposites in their social consequences (De Waal 2006:26). Sympathy can be defined as "an affective response that consists of feelings of sorrow or concern for a distressed or needy other (rather than the same emotion as the other person). Sympathy is believed to involve an other-oriented, altruistic motivation" (De Waal 2006:26 referring to Eisenberg 2000:677). Personal distress, on the other hand, makes the affected party selfishly seek to reduce its own distress, which is similar to what it has perceived in the object (De Waal 2006:27). Therefore, personal distress is not concerned with the situation of the empathy-inducing other. In this regard De Waal (1996:46) provides the following example:

The screams of a severely punished or rejected infant rhesus monkey will often cause other infants to approach, embrace, mount, or even pile on top of the victim. The

distress of one infant seems to spread to its peers, which then soothe their own arousal by seeking contact.

Considering the lack of cognitive evaluation and behavioural complementarity in personal distress, it does not reach beyond the level of emotional contagion (De Waal 2006:27).

Empathy and sympathy are capacities that form an essential part of animal lives; even though most modern textbooks on animal cognition fail to index them. According to De Waal (2006:27) these capacities are merely being overlooked by a science that traditionally focusses on individual rather than inter-individual capacities. Survival often depends on how animals get along within their group in a competitive, as well as a cooperative way. The highest cognitive achievements are, therefore, expected in the social domain. In De Waal's (2006:27) opinion, mechanisms to evaluate the emotional states of others and quickly respond to them must have been favoured by selection. Empathy is just such a mechanism.

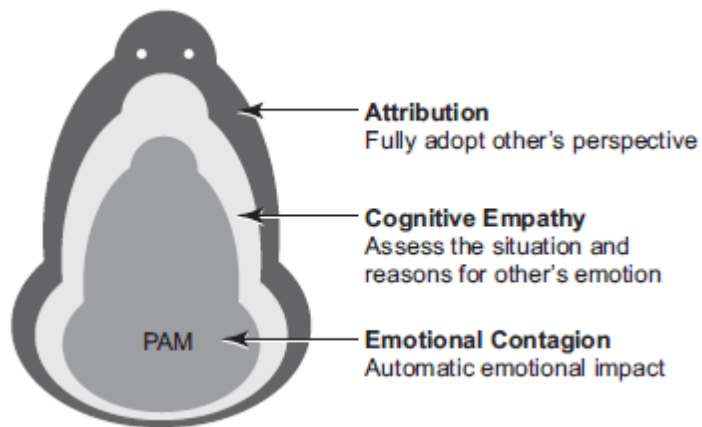
A tight relation between sympathy and empathy, and their expression in psychological altruism, exists in human behaviour. It is, therefore, according to De Waal (2006:28), sensible to assume that the caring and altruistic reactions of other animals, especially mammals, rest on similar mechanisms. Furthermore, responses to the emotions of others, rooted in attachment, are commonplace in social animals. In reference to research done by De Waal (2003) and Preston and De Waal (2002), behavioural and physiological data suggest emotional contagion in a variety of species. It is worth mentioning that although early studies suggest that animals try to alleviate or prevent distress in others by behaving in certain ways, there are still a few areas of uncertainty. According to De Waal (2006:29) it remains unclear if "...spontaneous responses to distressed conspecifics are explained by (a) aversion to distress signals of others, (b) personal distress generated through emotional contagion, or (c) true helping motivations". Extensive work on non-human primates has provided further information. Some of the evidence on empathic reactions furnished is qualitative, but quantitative data exists as well. De Waal (2006; 1996; 1997; etc.) provides multiple anecdotes and striking depictions of primate empathy and altruism.

### 3.2.3 De Waal's Russian Doll Model of Empathy

The core of empathetic capacity, as proposed by Preston and De Waal (2002:284-308), is “a relatively simple mechanism that provides an observer (the “subject”) with access to the emotional state of another (the “object”) through the subject’s own neural and bodily representations”. The subject’s neural representations of similar states are automatically activated, once the subject attends to the object’s state. It will be easier for the subject’s perception to activate motor and autonomic responses that match the object’s with a higher similarity between the subject and object. This activation, according to De Waal (2006:37), allows the subject to get “under the skin” of the object. It is accomplished by sharing the feeling and needs of the object, the embodiment of which, in turn, promotes sympathy, compassion and helping. De Waal (2006:38) also notes that the Perception-Action Mechanism (PAM) of Preston and De Waal (2002) fits the somatic marker hypothesis of emotions, as developed by Damasio (1994). The PAM also fits recent evidence of a link between perception and action at cellular level.

De Waal (2003:379-399) developed a Russian Doll Model depicting how simple forms of empathy relate to more complex forms thereof. De Waal (2006:39) notes that this model does not claim that higher cognitive levels of empathy are irrelevant, but rather promotes the notion that higher cognitive levels of empathy are built on a firm, hardwired basis without which humans would be at loss about what moves others. Certainly, not all empathy can be reduced to emotional contagion, but it never gets around it. In short, De Waal (2003:396) describes the Russian Doll Model as follows:

According to the Russian Doll Model, empathy covers all processes leading to related emotional states in subject and object. At its core is a simple, automatic Perception-Action Mechanism (PAM), which results in immediate, often unconscious state matching between individuals. Higher levels of empathy that build on this hardwired basis include cognitive empathy (i.e., understanding the reasons for the other’s emotions) and mental state attribution (i.e., fully adopting the other’s perspective). The Russian Doll Model proposes that outer layers require inner ones.



**Figure 1** De Waal's Russian Doll Model (De Waal 2006:39).

Cognitive empathy makes it possible to provide targeted help that takes the specific needs of the other into account. According to De Waal (2006:40), these responses go well beyond emotional contagion. However, it would be hard to explain these responses without the motivation provided by the emotional component. Monkeys, as well as other social mammals, seem to clearly hold emotional contagion and a limited degree of targeted helping. Yet, targeted helping is a far more robust phenomenon in the greater apes (De Waal 2006:40).

The short, but critical review of De Waal's view on empathy, emphasizes that it is not an all-or-nothing phenomenon. Rather, "it covers a wide range of emotional linkage patterns, from the very simple and automatic to the highly sophisticated" De Waal (2006:41). It is reasonable to first try and understand the basic forms of empathy before focussing on the variations that cognitive evolution has built on top of this foundation.

### 3.3 "IS" AND "OUGHT"

The so-called is/ought distinction can be viewed as one of the most frustrating difficulties facing attempts to root morality in biology (De Waal 2014b:185). David Hume (1739; according to De Waal 2014b:185) is known for formulating the concept, not seeing it as a sharp distinction. The motivation behind this distinction is Hume noticing how frequently authors move from accounts of how things are to

proclamations about how things ought to be; the way we feel human beings ought to behave is not merely a reflection of human nature.

With regard to the issue of morality, the evolution of behaviour is sometimes considered irrelevant. The reason for this is that the evolution of behaviour lacks the normative character of morality ('ought'), and consists entirely of descriptions of how things came about ('is'). However, according to De Waal (2014b:185), evolved behaviour, including that of other animals, is not entirely lacking in normativity. Normativity can be defined as devotion to a standard or ideal. If this is the case, there is sufficient evidence that animals treat their social relationships in this manner. Social values are therefore being pursued by animals. In the article, *Natural normativity: The 'is' and 'ought' of animal behaviour*, De Waal (2014b) reviews evidence confirming that non-human primates actively try to preserve harmony with their social network. These non-human primates pursue this ideal by e.g. reconciling after conflict, breaking up fights between others and protesting against unequal divisions. In doing so, they correct deviations from an ideal state. Anticipatory conflict resolution and emotional self-control is also shown by them in order to prevent ideal state deviations. De Waal (2014b:185) makes the following remark in this regard: "Recognition of the goal-orientation and normative character of animal social behaviour permits us to partially bridge the is/ought divide erected in relation to human moral behaviour".

In agreement with many philosophers, De Waal (2014b:187) mentions that it is hard, maybe impossible, to reason from the level of how things are to the level of how things ought to be. De Waal (2014b:187) goes on to explore the width of the is/ought division by entering the domain of actual behavioural tendencies and motivations instead of the conceptual domain. What if morality is grounded in emotional values, as Hume suggested, and not rationally constructed? What if biology informs us of the "ought" side of the division and thus provides us with an explanation for the values we pursue and the evolutionary reason behind them? This would, of course, place biology not only on the "is" side of the division. De Waal (2014b:187) argues that all organisms attempt certain outcomes of which survival and reproduction are part of. However, social outcomes, close to those supported by human morality, are also pursued by many organisms.

It can be argued that the behaviour of other animals is normative because it seeks certain outcomes, but they seek these outcomes without normative judgement. Animal behaviour is not free of normativity, which can be defined as the adherence to an ideal or standard (De Waal 2014b:187). Physical structures built by animals guided by a template of how the structure ought to look, as regularly seen in nature, is a clear example of this notion. This does not imply normative judgement, however, goal states are undeniably pursued by animals whether it be collectively or individually. The question De Waal (2014b:187) asks in this regard, is whether animals do the same in terms of society at large and social relations. In an attempt to answer the preceding question, De Waal (2014b:188) examines the notions of (1) social hierarchy and impulse control, (2) one-on-one normativity and (3) community concern.

### 3.3.1 Social Hierarchy and Impulse Control

De Waal (2014b:188) sheds light on a phenomenon called a *dominance hierarchy*, which is a massive system of social inhibitions. The dominance hierarchy paved the way for human morality, which is a similar system. In the dominance hierarchy, impulse control is necessary to avoid inconvenient consequences. For example, low-ranking males, in macaques and other primates, vary their behaviour depending on the presence or absence of the alpha male (De Waal 2014b:188). Immediately after an alpha male turns his back, other males will approach females. Both low-ranking and high-ranking animals benefit from impulse control. De Waal (2014b:188) mentions a young male chimpanzee may challenge an alpha male's nerves by throwing rocks in his direction or making an impressive charging display with all his hair on end. Experienced alpha males will, however, completely ignore this disturbance, subsequently forcing the younger male to give up or intensify the challenge. Punishment ultimately leads to inhibitions associated with the hierarchy (De Waal 2014b:189).

Referencing research done by Mischel et al. (1972) and Logue (1988), De Waal (2014b:189) states that the capacity for impulse control can be experimentally tested similar to the testing of delayed gratification in children. It seems as if the same

interweavement between cognition and emotion observed in humans can be applied to our close relatives. This, therefore, includes the deliberate control of emotions. De Waal (2014b:190) makes the following statement in this regard: “Insofar as such control is mediated by the frontal lobes, it should be pointed out that the popular view that this part of the brain is exceptionally developed in our species is erroneous. The human brain is essentially a linearly scaled-up monkey brain”.

Here, morality is defined as a system of rules that orbits around the two Hs of Helping or at least not Hurting fellow human beings (2014b:191).

### 3.3.1.1 Helping or (not) Hurting

De Waal (2005a:279) has a rather atypical view of morality that involves either Helping or (not) Hurting, concepts which are interlocked. De Waal (2005a:279) makes use of a person drowning as an example. If person A is drowning and person B withholds assistance, person B is, in effect, hurting person A. Person B’s decision to help or not is essentially a moral choice. According to De Waal (2005a:279), anything in conflict with Helping or (not) Hurting cannot be associated with morality, even if it is proposed as a moral concern. Food and mates are critical resources concerning Helping or (not) Hurting as both are part of rules regarding exchange and possession (De Waal 2005a:280). With reference to male primates, mates are most important as their reproduction depends on the number of fertilized females. Food is, on the other hand, more vital to female primates. In this regard, De Waal (2005a:280) is of opinion that:

It is logical...that sex-for-food deals among apes – in which copulation leads to the sharing of food – are asymmetrical: males go for the sex, females for the food. Since the giving and receiving occur almost at the same time, these deals are a simple form of reciprocity.

According to De Waal (2005a:281), true reciprocity relies on trust, memory, felt obligations and gratitude, and therefore it is more complicated than stated above. People often do favours that are repaid much later. Reciprocity is part and parcel of our society and it would be shocking if someone failed to grasp the idea. For example, Person A helped person B move a large refrigerator from the 3<sup>rd</sup> floor of their



apartment. A few months later, person A is also moving and calls person B to inform them that they also have a large refrigerator that needs to be moved. If person B does not offer to help move the refrigerator, person A might remind person B of how they helped them move their refrigerator, which might be provoking. If person B still does not offer to help, person A might explicitly mention the idea of reciprocity, which will be most embarrassing for person A. Say for instance person B is of the opinion that they do not believe in reciprocity, person A would find that truly disturbing. Even if people have the understanding that the repaying of a favour is not always possible, it is hard to understand somebody who deliberately denies mutual interchange. The denial will result in that person being a social reject, someone, according to De Waal (2005a:281), who lacks a crucial moral tendency.

De Waal (2005a:281) defines reciprocity as an elegant, all-encompassing principle, a human universal, the flipside of which is revenge. Reciprocity can easily be explored by the concept of food sharing. According to De Waal (2005a:285) sharing can be traced back to the days when hunting was essential. It also explains why it is not very common in other primates. Three primates can be discerned as being the best at public sharing, namely humans, capuchin monkeys and chimpanzees. All three primates are fond of meat and hunt in groups. These primates even share among adult males, which makes sense because males do most of the hunting. On this point, De Waal (2005a:285) makes the following statement:

If a taste for meat is indeed at the root of sharing, it is hard to escape the conclusion that human morality is steeped in blood. When we give money to begging strangers, ship food to starving masses, or vote for measures that benefit the poor, we follow impulses shaped since our ancestors first gathered around a meat possessor. At the centre of the original circle is something desired by many but obtainable only with exceptional strength or skill.

De Waal (2005a:289), in his discussion on Helping or (not) Hurting, states that people are like bookkeeping clerks. People are constantly aware of all incoming and outgoing transactions. Received help will be reimbursed with help and received hurt with hurt. Unnecessary imbalances are not welcome.

Morality, therefore, often puts community interests before those of the individual and addresses the well-being of others. Self-interest is not denied, but limited in order to promote a cooperative society (De Waal 1996, 2005). It is this functional definition that sets morality apart from habits and eating with lifestyle practices, such as eating with a knife and a fork versus bare hands (De Waal 2014b:191). Already in young children the distinction between moral rules and conventions can be detected.

De Waal (2013:221; 2014b:191) distinguishes between two basic levels of moral rules. The first level, one-on-one normativity, concerns social relationships, whilst the second level is rules at the community level.

### 3.3.2 One-on-One Normativity

One-on-one normativity reflects an understanding of how an individual's own behaviour affects others. According to De Waal (2013:221) we share this level of moral rules with other social animals, that develop comparable inhibitions and codes of behaviour. Disharmony is the product of failure, which explains the obligation or "ought" to consider the interests of other individuals. The protection of valued relationships is the centre around which the one-on-one level revolves. According to De Waal & van Roosmalen (1979:55-56), conflict resolution can be viewed as one of the most common expressions of relationship preservation. Because of primatology's interest in social relationships, it became clear that almost thirty different primate species engage in reconciliation after fights and that reconciliation is not limited to primates only (De Waal 2014b:192). This widespread occurrence of reconciliation is due to its restoration of relationships damaged by aggression, which are crucial for survival. Repair mechanisms are crucial in established cooperative relationships as conflict occasionally arises in these relationships.

According to De Waal (2014b:193) most of the studies regarding animal conflict resolution support the so called "Valuable Relationship Hypothesis", which he formulates as follows: "Reconciliation will occur especially between individuals who stand much to lose if their relationship deteriorates". In reference to Verbeek et al. (2000), De Waal (2014b:194) notes that very similar results have been obtained by

applying the same standardized methodology, as used in the above-mentioned studies, to children.

Primates shield against the adverse effects of conflict and distress, a notion known as “preventive conflict resolution” (De Waal 2014b:194). This phenomenon can be clearly observed during play. De Waal (2014b:194) refers to the following argument by Bekhoff (2001:85):

During social play, while individuals are having fun in a relatively safe environment, they learn ground rules that are acceptable to others — how hard they can bite, how roughly they can interact — and how to resolve conflicts. There is a premium on playing fairly and trusting others to do so as well. There are codes of social conduct that regulate what is permissible and what is not permissible, and the existence of these codes might have something to say about the evolution of morality.

Bekhoff (2001:85) thus draws a parallel between preventative conflict resolution and morality. Great value is attached to social harmony which becomes visible in the maintenance of good relations.

De Waal (2014b:195) draws attention to another way of maintaining social relations which is known as “striving for fair reward divisions”. This becomes clear in negative reactions towards skewed reward distributions, also known as “inequity aversion (IA)”. In a cooperative environment, animals need to compare the benefits they obtain relative to their cooperation partners to ensure that they are not being taken advantage of. In the case of unfair distribution, reciprocal cooperation can easily become a form of altruism on the part of those who earn less. According to De Waal (2014b:195) this outcome problem is increasingly a theme in animal research and has been recognized in humans.

A distinction is being made between disadvantageous IA and advantageous IA. In the former, the subject responds negatively to receiving less, whereas in the case of the latter, the subject responds negatively to receiving a more valuable outcome. Both responses occur in humans. According to Brosnan & De Waal (2012:336:351) advantageous IA, which represents a full sense of fairness, might occur in situations where individuals anticipate the negative implications of disadvantageous IA in other

individuals. The individual who receives more tries to prevent the relationship from falling apart, because of the inequity, by equalizing the outcome. Brosnan & De Waal (2012:341) refer to this phenomenon as a “second-order sense of fairness” and make the following remark in this regard (Brosnan & De Waal 2012:341): “In order to prevent conflict within close or beneficial relationships, the advantaged individual will benefit from either protesting or rectifying the situation”.

De Waal (2014b:197) mentions that there are thus far no signs of second-order fairness in monkeys, however, with regards to apes the evidence is increasing. De Waal (2014b:197) refers a study done by Proctor et al (2013) as but one example. This study is based on the Ultimatum Game (UG), which is considered by De Waal (2014b:197) as the gold standard of human fairness. The UG requires two individuals, a proposer and a respondent taking part in the game. The Proposer can split money with the Respondent. The proposer accepting the offer will result in both the players being rewarded, using the proposed split. If the offer is rejected by the Proposer, neither player will be rewarded. Proctor et al (2013) designed a more intuitive UG procedure for both 3 to 5-year-old human children and chimpanzees (De Waal 2014b:197):

Proposers were presented with a choice of two differently coloured tokens that could be exchanged with a human experimenter for food. One colour represented an equal reward distribution (3 vs. 3 banana slices), whereas the other represented an unequal distribution favouring the Proposer (5 vs. 1 banana slices). The Proposer would need to hand the token to its partner, the Respondent, sitting behind a mesh panel. Respondents could either accept the token, and return it to the experimenter, or reject it by not returning the token. As in the typical human UG, Proposers thus needed the Respondent’s collaboration. Token choices were compared with choices in the presence of passive Respondents, who lacked any influence. Chimpanzees were sensitive to the contingencies of the game in the same way as humans. If their partner had control, they more often split the rewards equally. In the absence of partner influence, however, they preferred the option that gave themselves the largest proportion of rewards.

The study suggests that humans and chimpanzees share patterns of proactive decision-making in relation to fair outcomes, since the children behaved similarly (De

Waal 2014b:197). Because of the thinness of the one-on-one level of moral rules, De Waal (2013:222) developed the second level, known as community concern, which will be shortly explored.

### 3.3.3 Community Concern

Personal interests are not denied on this level, but the goal is to rather achieve harmony within the larger community. De Waal (2013:222) argues that even though some animals show basic forms of community concern, it is at this level that human morality differs from anything encountered thus far. Human morality may, therefore, be unique in the sense that humans extend their moral reasoning to the society as a whole. In doing this, humans speculate what would happen to a community if everyone acted in a particular way. The value system of humans is even extended to interactions that they are not directly involved in. De Waal (2014b:198) distinguishes between typical emotions and moral emotions:

Typical emotions concern only our personal interests – how we have been treated or how we want to be treated – whereas moral emotions go beyond this. They deal with right and wrong at a more abstract level. It is only when we make judgements of how anyone under the circumstances ought to be treated that we speak of moral judgement.

Traces of this level can, however, be seen in the behaviour of some primates. De Waal (1996) previously referred to this level as “community concern”. According to De Waal (2014b:198) there are many examples of impartial policing and mediation that reflect community values. The highest-ranking member of the group, in some species, end fights or try to reduce the harshness of aggression. De Waal (1982) provides detailed descriptions and analyses showing that social ties with the conflict participants are ignored by males during this process. Controlling males intervene independent of their usual social preferences, whereas most individuals support friends and kin (De Waal 1992:223-257). A basic form of justice in the social systems of non-human primates are suggested by the ability to put such preferences aside (De Waal 2014b:198).

Mediation is another important method of conflict resolution that has been identified in primate groups. De Waal (2014b:198) defines mediation as follows: “Mediation occurs when a third party to a conflict becomes the bridge between two former opponents unable to reconcile without external help”. The following example of two adult males brought together by an adult female after serious conflicts between the two opponents is provided by De Waal & Van Roosmalen (1979:62):

The female approached one of the males, kissed or touched him or presented towards him and then slowly walked towards the other male. If the male followed, he did so very close behind her (often inspecting her genitals) and without looking at the other male. On a few occasions the female looked behind at her follower, and sometimes returned to a male that stayed behind to pull at his arm to make him follow. When the female sat down close to the other male, both males started to groom her and they simply continued when she went off.

The individual interests of the mediator should not be overlooked, even though mediation is known as an expression of community concern. Community concern merely refers to individuals advancing the interests of their own community as a whole and that might also be to their own benefit. Sacrifice and thus selection at group level are not implied by community concern.

De Waal (2014b:199) lastly points to the critical role that prestige and reputation play in community concern. Due to prestige and reputation humans often act on behalf of the community despite the fact that they do not directly gain from it. Traces of reputation can be observed in apes. De Waal (2014b:199) draws attention to bystanders that would wake up an alpha male in the case of a big fight that gets out of control. He is known as the most affective mediator and is urged to step in. Even though this evidence suggest that chimpanzees perform actions to benefit the community as a whole it still falls short of the human pre-occupation with community welfare as a whole. It is at this level that human moral systems especially deviate from the normativity found in other primates (De Waal 2014b:200).

In conclusion, the notion that biology and animal behaviour are located solely on the “is” side of the is/ought divide is not easily maintainable (De Waal 2014b:200). It is possible, of course, to describe animal and human behaviour without any reference to

goals, values and intentions. However, such descriptions overlook an indispensable aspect. According to De Waal (2014b:200),

Non-human primates, as well as many other animals, strive for specific outcomes. They do so both in relation to physical structures, such as nests and webs, and in relation to social relationships. They actively try to preserve harmony within their social network. They frequently correct deviations from this ideal by, e.g., reconciling after conflict, protesting against unequal divisions, and breaking up fights amongst others. They behave normatively in the sense of correcting, or trying to correct, deviations from an ideal state. They also show emotional self-control and anticipatory conflict resolution in order to prevent such deviations.

With reference to the above-mentioned, the leap between primate behaviour and human moral norms is much narrower than commonly thought. The occurrence of differences, however, are not denied. According to De Waal (2014b:200) other primates seem not to extend norms beyond their immediate social environment and appear unworried about social relationships or situations that they do not directly participate in. They also may not, like humans, feel any obligation to be good, or experience guilt and shame whenever they fail. We do not know if other animals experience such “ought” feelings.

Social behaviour may be evaluated as either successful or unsuccessful in promoting its goals, but not in terms of right and wrong. On the contrary, a kind of evaluation of past actions can be suggested by social behaviour. De Waal (1989) provides the following example to support his view: “one bonobo bites another and soon thereafter approaches, remembering the exact location of the bite, only to spend half an hour licking the inflicted injury”. If one takes into account that animal experience is unable to be reached, the bearing of internalized normativity is still highly speculative.

De Waal (2014b:201), for the moment, claims “that insofar as the ‘ought’ of human morality reflects a preference for certain social outcomes over others, similar preferences seem to guide other animals without necessarily implying that they are guided by the same sense of obligation of how they ought to behave as humans”.

### 3.4 DE WAAL'S TOWER OF MORALITY

De Waal (2006:161) focuses on what is present in other primates and emphasizes the shared characteristics, rather than focusing on what seems to be missing, as some of his most respected colleagues do (De Waal 2006:191). "This reflects my desire to counter the idea that human morality is somehow at odds with our animal background, or even with nature in general" (De Waal 2006:161). Whilst taking into account the suggestions to consider discontinuities, De Waal (2006:161) is of opinion that evolution does not occur in leaps. Modified old traits result in new traits, therefore closely-related species only differ gradually. Human morality, while representing a noteworthy step forward, barely breaks with the past.

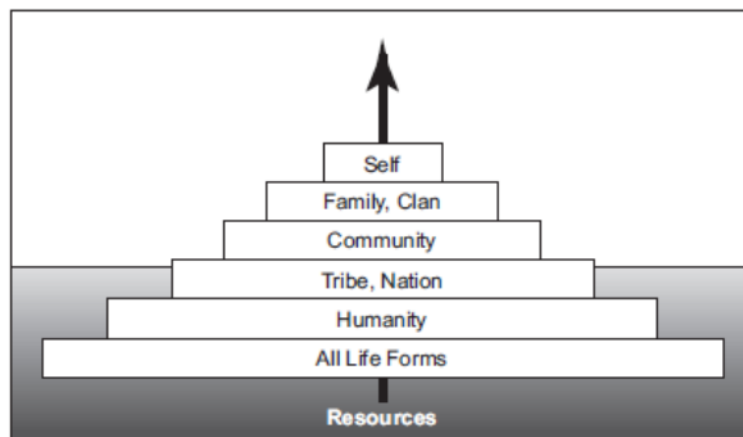
De Waal (2006:161), in reference to MacIntyre (1999), mentions that the fact that we rely on a support system for survival gave birth to morality as a group-oriented phenomenon. A person living in isolation would have no need for morality. This is also true of someone living with other people without reciprocal reliance. There would seem to be no need to evolve social restraints or moral tendencies (De Waal 2006:162). Limitations are placed on behaviour through morality, in order to encourage cooperation within the community. Moral rules create a particular method of living amongst all people, regardless of age, social class, health and so on (De Waal 2006:162). Morality often places the common good above individual interests, as it helps people get along and complete joint endeavours. Morality insists that we treat others the way we would like to be treated, but never denies individual interests. The moral domain of actions, is, more specifically, the action of the two Hs, Helping or (not) Hurting (as discussed earlier), which are interconnected. The decision to help, or not, is by all accounts a moral one (De Waal 2006:162; 2005).

De Waal (2006:162) is clear about the view that anything unrelated to the two Hs falls outside morality. The distinction between morality and social conventions must be noted. Social conventions, of which there is a great variety, are not necessarily anchored in the needs of others or the community. Different cultures support different social conventions. Moral rules constrained by their impact on the well-being of others, are far more constant than social conventions (De Waal 2006:162). It is impossible for



a moral system to give equal consideration to all life on earth and, therefore, the system has to prioritise (De Waal 2006:163). This is due to how well orientation towards the own group has served humanity in both the past and present. Moral systems are essentially biased towards the in-group. De Waal (2006:163) argues that morality evolved to firstly deal with the own community. Non-human animals, members of other groups and humanity in general has only recently been included.

De Waal (1996:212) developed the concept of the *Floating Pyramids* to explain the expanding circle of human morality. Altruism is assured by what an individual can afford. The circle of morality can only reach farther if the survival and health of the innermost circles are secure. De Waal (1996:212) prefers using the image of a floating pyramid, rather than an expanding circle. The available resources provide the force lifting the pyramid out of the water, whilst the extent of moral inclusion is reflected by the size above the surface. The wider the network of aid and obligation, the higher the pyramid rises.



**Figure 2** De Waal's Floating Pyramid of Morality (De Waal 2006:165).

Loyalty is a moral duty (De Waal 2006:165). It is not just that humans are biased in favour of the innermost circles, we ought to be. However, species take care of kin and build exchange networks with fellow human beings both inside and outside their group, as soon as the immediate threat to survival is removed. Human beings, compared to other primates, are a remarkably giving species (De Waal 1996:214). Moral inclusion does not suggest that every person is equally valued. They may be equal in principle,

but in practice human cooperativeness and kindness are spread thinner the farther we get from community and kin (De Waal 2006:214).

### 3.4.1 Three Levels of Morality

De Waal (2006:166) argues that even if the human moral capacity evolved out of primate group life, it should not be taken to mean that specific moral solutions are prescribed by our genes. Moral rules are not imprinted in the genome. People are not born with any specific moral norms in mind. They are, however, born with a learning agenda that tells them which information to absorb. This allows people to figure out, comprehend and eventually internalize the moral fabric of our native society. De Waal (2006:166) notices parallels between the biological foundation of morality and language, due to a similar learning agenda that underlies both moral rules and language acquisition. A child, for example, is not born with any particular language, but with the ability to learn any language. The same applies to moral rules. People are born to absorb moral rules and weigh moral options. This results in a thoroughly flexible system that nevertheless revolves around the same basic loyalties and the same two Hs it always has (De Waal 2006:167).

Human morality can be divided into three distinct levels (De Waal 2006:167). The first level and one half of the second level seem to have obvious parallels in other primates. All of human morality is continuous with primate sociality, since the upper levels cannot exist without the lower levels (De Waal 2006:167). The three levels of morality are briefly discussed in the following.

#### 3.4.1.1 Level One: Building Blocks

The first level of morality is what De Waal (2006:167) describes as the level of moral sentiments, or the psychological “building blocks” of morality. These blocks include, all of which have been documented in other primates, reciprocity and empathy, retribution, conflict resolution, and a sense of fairness. De Waal (1999:appendix A) prefers to use shared language for humans and apes in the classification of these blocks. The reason is that if two closely-related species act similarly, the logical default assumption is that the underlying psychology is also similar. “From an evolutionary

perspective, we really have no choice other than to use shared language for similar behavioural phenomena in humans and apes” (De Waal 2006:167). The first level of morality seems well-developed in the close relatives of humans. However, major differences occur on the second level (De Waal 2006:169).

#### 3.4.1.2 Level Two: Social Pressure

The second level of morality concerns the social pressure put onto every member of the community to contribute to common goals and uphold agreed-upon social rules (De Waal 2006:169). This level is not entirely absent in other primates. Chimpanzees, for example, do appear to follow social rules and care about the state of affairs within their group. The most important feature, in relation to morality, is community concern, as previously mentioned. Community concern can be reflected in the way high-ranking females restore the peace by bringing parties in conflict together after a fight (De Waal 1996; De Waal & Van Roosmalen 1979:62).

De Waal (2006:168) further describes social pressure as insisting that everyone behaves in a way that favours cooperative group life. Reward, punishment and reputation building are the tools to this end. Social pressure is less systematic and less concerned with the goals of society as a whole, although community concern and prescriptive social rules do exist in other primates. With regards to our own species, the idea that individuals can make a difference for the group as a whole has been taken a giant leap further (De Waal 2006:171). Deeds that contribute to the greater good are praised by people, whilst deeds that undermine the social fabric are criticised. Chimpanzees also distinguish between acceptable and unacceptable behaviour. This distinction, however, is always closely tied to immediate consequences, specifically for themselves. Therefore, apes and other highly social animals seem capable of developing prescriptive social rules (De Waal 2006:172; & 1996). As impressive an example as this is, the human species goes significantly further than any other.

Moral systems impose countless restraints. Morality, consistent with the biological imperatives of reproduction and survival, reinforces a cooperative society. A society to which most are prepared to contribute and from which everyone benefits. Morality

functions as a social contract (De Waal 2006:173). The third level of morality goes even further and comparisons with other animals become scarcer.

### 3.4.1.3 Level Three: Judgement and Reasoning

The level of judgement and reasoning refers to the internalization of others' needs and goals to the degree that these needs and goals figure in an individual's judgement of behaviour (De Waal 2006:168). This includes others' behaviour that does not directly concern the individual. Humans follow an internal compass, judging themselves (and others) by evaluating the intentions and beliefs that underlie their own (and others') actions. According to De Waal (2006:174) the desire for an internally consistent moral framework is uniquely human. This does not imply that moral reasoning is totally disconnected from primate social tendencies. The internal compass of humans is shaped by the social environment (De Waal 2006:174). Positive or negative reactions to behaviour are noticed and the goals of others and the needs of our community are derived from this experience. These goals and needs are internalized. Moral norms, therefore, are born from internalized interactions with others (De Waal 2006:174). De Waal (2006:174) goes so far as to say that a human being growing up in isolation would never attain moral reasoning. Such a human being would lack the experience to be sensitive to the needs and interests of others and consequently lack the ability to look at the world from a different perspective than their own. De Waal (2006:175) makes the following statement in this regard:

I consider this level of morality, with its desire for consistency and “disinterestedness,” and its careful weighing of what one did against what one could or should have done, uniquely human. Even though it never fully transcends primate social motives, our internal dialogue nevertheless lifts moral behaviour to a level of abstraction and self-reflection unheard of before our species entered the evolutionary scene.

Social interaction must, therefore, be at the root of moral reasoning (De Waal 2006:174).

### 3.5 BOTTOM-UP MORALITY

De Waal (2013:289), holding a bottom-up view of morality, bears in mind the fact that everything started simple. This is not only true of our bodies, but also our minds and behaviour. Religion drilled into our minds the belief that morality is somehow enforced on us by an external source (De Waal 2013:287), a view that is also embraced by philosophy. This belief contrasts what modern sciences make known about other animals and the pre-eminence of emotions and intuitions. By holding a bottom-up view of morality, De Waal (2013:289) emphasizes that “the moral law is not imposed from above or derived from well-reasoned principles; rather, it arises from ingrained values that have been there since the beginning of time”.

The most essential deep-rooted value stems from the survival value of group life. People are prompt to do anything possible to have a good relationship with those they are dependent on. The desire to get along, to be loved or to belong is the force behind these actions. De Waal (2013:289) states that humans share this value with other social primates whom rely on a similar filter between action and emotion in order to reach a mutually agreeable mode of living. It all boils down to inhibitions. Humans are mammals; a group of animals known for sensitivity to one another’s emotions (De Waal 2013:291).

There is, however, the next level of morality, also referred to in the preceding discussion. It is the level where humans are far ahead of other primates (De Waal 2013:297). Humans show intense care for the group level, resulting in the development of notions of right and wrong for everyone around and not just the individual or close relations. This level of morality involves greater powers of abstraction and anticipation of what may happen if we allow others to get away with behaviour that does not necessarily affect us (De Waal 2013:297). The impact of this behaviour on the greater good can be imagined through our capacity of imagination. Reputations of reliability and righteousness are being built whilst we disapprove of fraud and uncooperative people; the human goal is to put collective goals above selfish ones. According to De Waal (2013:297), morality serves to distribute the benefits of group life and to limit exploitation by a dominant elite. In this regard, De Waal

(2013:297) is following the traditional biological view of morality as an in-group phenomenon, a view that can be traced back to Darwin. De Waal (2013:297) refers to a summary by Christopher Boehm<sup>12</sup> (2012):

Our moral codes apply fully only within the group, be it a language group, a non-literate population that shares the same piece of real estate or the same ethnic identity, or a nation. There seems to be a special, pejorative moral “discount” applied to cultural strangers – who often are not even considered to be fully human...

There is no need for morality to only be applied to within-group contexts, even though there is no doubt that morality evolved for within-group reasons without much consideration for humanity at large. De Waal (2013:298) highlights the fact that, at present, we try to move beyond moral narrow-mindedness. Everything we have learnt about an honourable human life is applied to the wider world, including strangers and enemies.

### 3.6 CONCLUSION

De Waal (2006:57) asks “why morality was seen in the past as unnatural, altruistic behaviour, as hypocritical and why emotions were totally omitted from the debate?”, which closely relates to a disbelief in the “Darwinian world”. The answer lays locked up in the fact that there is not a big connection between the process of natural selection and the various products thereof (De Waal 2006:58). We make the mistake of thinking natural selection only leads to cruel and merciless creatures because the process seems cruel and merciless (De Waal 2005a). It is important to note that natural selection does not work in such a manner, but simply benefits organisms that survive and reproduce. How they achieve this depends on them. Any organism that can do better by either becoming more or less aggressive than others, more or less cooperative, or more or less caring will be able to spread genes.

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<sup>12</sup> Christopher Boehm is an American cultural anthropologist with a sub-specialty in primatology, who researches conflict resolution, altruism, moral origins, and feuding and warfare.

The process does not specify a way to success. Natural selection has the capacity to produce a wide variety of organisms from the most asocial and competing to the friendliest and gentle. “The same process may not have specified our moral rules and values, but it has provided us with the psychological makeup, tendencies, and abilities to develop a compass for life’s choices that takes the interests of the entire community into account, which is the essence of human morality” (De Waal 2006:58).

De Waal (1996:10) mentions the necessity of a biological perspective on morality. The main building blocks or prerequisites of morality is empathy and reciprocity. A moral society is characterised by mutual exchange and emotional interest in other people. De Waal (2006:16) does not deem it necessary to explain moral tendencies with relation to selection in group context. It seems as if theories of selection in relation to families and mutual altruism are fairly successful. De Waal emphasises the importance of the capacities underlying behaviour, a distinction Darwin could have noted by looking past the behaviour to the underlying emotions, intentions and capacities. The relevant question is whether non-human animals have the capacity for reciprocity and revenge, the implementation of social rules, the settlement of disputes and sympathy and empathy (De Waal 2006:16, compare Flack & De Waal 2000). De Waal builds his personal argument for the origin of morality on the continuity between human social instincts and those of apes, our closest related species.

De Waal (2006:181) is clear on his point of view that morality elaborates upon pre-existing tendencies. The main ingredients of a moral society do not include religion, since it comes from within (De Waal 2013:300). Humans consist of the emotions of a social animal, particularly a mammal, that is affected by the distress of others. This leads to levels of altruism far in excess of what gene-centric theories predict (De Waal 2013:302).

De Waal disagrees with anyone who pits evolution against morality. If humans the world over develop a sense of right and wrong, one of their deepest desires, according to De Waal (2013:302), must be to live in a moral world. Morality does not go against human nature and our desires are not all bad. We, as a group of animals, share a background with other primates and therefore we value social connections (De Waal 2013:302). Without this background, religion’s preaching about virtue and vice would

never be grasped by us. According to De Waal (2013:302) we are only receptive to religious virtue and vice due to our evolved grasp of the value of relationships, the need for trust and honesty, the benefits of cooperation, our sense of fairness and so on. Morality arose first, then modern religion got attached to it (De Waal 2013:302). The larger religions did not give us the moral law, rather they were invented to encourage it. De Waal (2013:303), however, does not minimize the role of religion, but is clear about his opinion that religion is not the wellspring of morality.

De Waal (2013:303; 2014:185) labels the separation between “is” and “ought” an intellectual torture which vexes any debate about moral evolution. “If the thought is that animals are mere “wantons”, lacking control over the impulses that nature has given them, we are on the wrong track” (De Waal 2013:303). Animals, like humans, favour certain outcomes and react with violence or fear to any abnormality. Although it sometimes seems like it, animals cannot merely do what they want. Bonobos, for example, face many expectations about their conduct, which others will not hesitate to remind them of (De Waal 2013:303). Their values are not altogether different from those underlying human morality, even if they lack notions of right and wrong that transcend their personal situation. They, similar to humans, strive to obey social rules, fit in, empathize with others, object to unfair arrangements and amend broken relationships (De Waal 2013:303).

According to De Waal (2013:304) the major challenge in the search for a better understanding of the origin of morality, is to move forward, beyond religion and especially beyond a top-down morality.

Our best known “moral laws” offer nice post hoc summaries of what we consider moral, but are limited in scope and full of holes. Morality has much more humble beginnings, which are recognizable in the behaviour of other animals. Everything science has learnt in the last few decades argues against the pessimistic view that morality is a thin veneer over a nasty human nature. On the contrary, our evolutionary background lends a massive helping hand without which we would never have gotten this far (De Waal 2013:304).

De Waal (2006:181) refers to a recommendation made by Wilson (1975:562) more than three decades ago: “the time has come for ethics to be removed temporarily from



the hands of philosophers and biologicized”. With regards to this recommendation, De Waal (2006:181) argues that currently we seem to be in the middle of this process. Philosophers, for example, are not pushed aside, rather they are included, so that the evolutionary basis of human morality can be clarified from a variety of disciplinary angles.

To neglect the common ground with other primates, and to deny the evolutionary roots of human morality, would be like arriving at the top of a tower to declare that the rest of the building is irrelevant, that the precious concept of “tower” ought to be reserved for its summit (De Waal 2006:181).

On the question, “if animals are moral?” De Waal (2006:181) simply concludes that they inhabit several floors of the tower of morality. Denial of even this modest proposal can only result in an impoverished view of the structure as a whole.

The next chapter will be a critical evaluation of the work done by De Waal on the origin of morality.

## CHAPTER 4

### FRANS DE WAAL IN CONTEMPORARY SCHOLARSHIP

#### 4.1 INTRODUCTION

It is hard to deny the importance of Frans de Waal's work on primate behaviour, which spans over three decades, including the last 18 years at the Yerkes National Primate Research Centre at Emory University in the United States of America. De Waal's work has contributed to a substantial shift in scientific and popular thinking about animal social behaviour. Specifically, De Waal's research on primate peace-making, conflict resolution and pro-social behaviour has discredited the assumption that primates are purely selfish, individualistic and aggressive beasts. His work makes the case that not only do many primates exhibit truly other-regarding behaviour, but also that this behaviour is as deeply rooted in their nature as is any instinct for self-preservation. Primates behave pro-socially not despite their biological dispositions, but rather as a natural manifestation of them. The focus of this chapter is a critical evaluation of De Waal's position on the origin of morality.

For 30 years De Waal has authored books on primatological perspectives on primate social behaviour that has opened our eyes to the bottom-up origins of our human behaviour, ranging from politics to empathy. In his 10<sup>th</sup> book, *The Bonobo and the Atheist: In Search of Humanism among the Primates* (2013), he extends that perspective by noting that o[i]t wasn't God who introduced us to morality; rather, it was the other way around. God was put into place to help us live the way we felt we ought to." "The way we felt we ought to" has a long evolutionary history and De Waal's thesis depends on numerous and convincing examples from our closest living relatives.

Barbara King<sup>13</sup> (2013:ad loc.) mentions De Waal is never naïve about animal goodness, as if it were hardwired, “how could he be when he has worked so closely for decades with chimpanzees, a species known for outbursts of brutal violence?” De Waal sees the bonobo as more empathetic than the chimpanzee. Bonobos share food and, even across different groups, enjoy sexy, peaceful and playful relationships. But nowhere is it a *gentle* natural world that he describes. De Waal’s focus is, instead, on the utter wrongness of the Veneer Theory<sup>14</sup>.

De Waal’s argument that morality is built into our species runs like a golden thread through most of his publications on morality. Rather than coming to us top-down from God, or any other external source, morality for De Waal springs bottom-up from our emotions and our day-to-day social interactions, which themselves evolved from foundations in animal societies.

Boomgaard (2008:695)<sup>15</sup>, in *Perspectives on de Waal’s Primates and Philosophers: How Morality Evolved*, begins his review of De Waal’s work on morality with the following remark:

Are humans basically self-centred, aggressive animals with only a thin coating of moral varnish? Or is our morality in our genes, part of our genetic inheritance? If so, do we find traces of morally induced behaviour in our nearest relatives, the apes? These questions have fascinated primatologist Frans de Waal most of his professional life, and they have been at the core of his many popular books.

De Waal argues that humans are moral animals, a commonality we have, at least up to a point, with chimpanzees and bonobos, which are, evolutionarily speaking, our

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<sup>13</sup> King is a Chancellor Professor of Anthropology at the College of William and Mary. With a long-standing research interest in primate behaviour and human evolution, King has studied baboon foraging in Kenya and gorilla and bonobo communication at captive facilities in the United States.

<sup>14</sup> Veneer theory is a term coined by Dutch primatologist Frans de Waal to label a view of human morality that he criticizes in his book "Primates and Philosophers: How Morality Evolved". The Theory is discussed in the following paragraph.

<sup>15</sup> Boomgaard is emeritus Professor of Environmental and Economic History of Southeast Asia, particularly Indonesia, at the University of Amsterdam, and Senior Researcher at Royal Institute of Linguistics and Anthropology (KITLV).

nearest relatives and which De Waal has studied for decades in zoos (Boomgaard 2008:695). He bases his arguments on this research and on a growing body of observational data from other scientists who have studied great apes in the wild in Africa. This particular argument of De Waal is the main focus of, amongst many others, *Primates and Philosophers: How Morality Evolved* (2006), *Good Natured* (1996) and *Our Inner Ape* (2005).

Most of the reviews discussed in this chapter focus on De Waal's publication, *Primates and Philosophers: How Morality Evolved*. The reason for this is that this particular publication developed from his Tanner Lectures at Princeton University and so has a peculiar structure. It includes essays by four scholars in response to the lectures and occasionally to De Waal's other books. The book closes with the author's response to the commentators.

In this particular publication, we find the core of De Waal's view on morality. De Waal makes a strong case for the evolutionary continuity of morality, whilst arguing against both what he calls "Veneer Theory" and "anthropodenial" (the unjustified refusal to contemplate similarities between humans and other animals). Whether or not the reader agrees with his thesis, *Primates and Philosophers* has some valuable insights into moral actions in primates and very useful conceptual distinctions between aspects of moral behaviour. De Waal advocates a bottom-up view of morality, as described in his book, *The Bonobo and the Atheist* (2013). In the following section, reviews of De Waal's opinion on the Veneer Theory, as well as his bottom-up morality, which advocates the natural roots of morality and evolutionary continuity, are discussed.

## 4.2 DE WAAL ON THE "VENEER THEORY"

De Waal has received extensive criticism on his, what some would call, attack on the "Veneer Theory". His strong opinion regarding the Veneer Theory is clearly stated and explained in, amongst others, his publication, *Primates and Philosophers: How Morality Evolved* (2006). De Waal's attack on the "Veneer Theory" – the idea that human ethics is only a thin veil covering an amoral and nasty nature – affords De Waal the pretext for defending his main general claim: that all the social animals, humans

included, are “good natured”<sup>16</sup> and that there is a strong continuity between human and animal behaviour even in the field of morality (Cavalieri<sup>17</sup> 2007:ad loc.).

According to Joyce (2010:ad loc.) the “Veneer Theory” can be explained as the idea that humans are naturally sociopaths and that empathy, altruism and morality are the result of recent cultural forces. In response to De Waal’s crusade against the “Veneer Theory” Joyce (2010:ad loc.) comments:

The extent to which de Waal dichotomizes this debate, however, masks much of interest. One can agree with the seemingly obvious fact that humans are obligatorily gregarious organisms – replete with various pro-social mechanisms – while still expressing reasonable doubt that our capacity to make moral judgments is the result of an innate mechanism dedicated to that task.

According to Cavalieri (2007:ad loc.) De Waal’s work is part of a wider scientific questioning of the traditional view of animal thought processing, within which non-humans have been granted cultures, an internal dialogue about values, a planned response to inequity and even personhood. De Waal compellingly maintains, against the various forms of post-Darwinian dualistic thinking represented by authors such as Sigmund Freud and Thomas Huxley, that empathy, sympathy, appreciation of right and wrong and a sense of fairness, far from being a culturally superimposed layer, are phenomena that we share with non-human beings (Cavalieri 2007:ad loc.).

Wright (2006:84) believes De Waal misunderstands the perspective of some people he labels “Veneer theorists” (as Wright’s perspective, for example). Wright (2006:84) claims that De Waal subsequently misses something important and edifying that evolutionary psychology can bring to discussions about human morality: “evolutionary psychology suggests the value of a third kind of theory about human morality that – to adapt de Waal’s terminology – we might call ‘naturalistic veneer theory’” .

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<sup>16</sup> A point made clear by the title of a widely discussed book of De Waal (1996), *Good Natured. The Origins of Right and Wrong in Humans and Other Animals*.

<sup>17</sup> Paola Cavalieri is an Italian philosopher, best known for her work arguing for the extension of human rights to the other great apes.

Wright (2006:94) believes that some of human beings' genetically-based moral intuitions are occasionally subject to subtle biases that direct them away from the truly moral. Nevertheless, he stresses the fact that he is not conforming to the archetype of the "Veneer theorist," as De Waal (2006) branded him. The reason being that Wright (2006:94) believes these biases are grounded in the genes and they are, therefore, not a mere "cultural overlay". Wright (2006:94) provides the following example:

In deciding how to exercise the sense of justice – in deciding who has done good and who has done bad, whose grievances are valid and whose aren't – humans seem naturally to pass judgments that work in favour of family and friends and against enemies and rivals.

This is one of the reasons why Wright does not agree with De Waal's apparent position that humans are in some fairly general sense "good natured" – an understanding De Waal seems to associate with the "naturalistic theory".

According to Wright (2006:95) there is a third category to which he rather belongs to. He is of the opinion that the human moral "infrastructure" – the part of human nature that we draw on for moral guidance and that includes some specific moral intuitions, is genetically rooted, not a "cultural overlay". This infrastructure, however, is not infrequently subject to systematic "corruption" (i.e., departure from what he would call true morality) that is itself rooted in the genes. He mentions that it is rooted in the genes because it served the Darwinian interests of our ancestors during evolution.

In this view, the moral judgements of human beings, although reached through a seemingly conscious and rational process of deliberation – a cognitive process – can be subtly biased by emotional factors. Wright (2006:95) offers the following example:

An only semiconscious undercurrent of hostility toward a rival may bias our judgment as to whether he is guilty of some crime, even though we convince ourselves that we have weighed the evidence objectively. We may honestly believe that our opinion that he deserves, say, the death penalty is a product of pure cognition, with no emotional influence; but the emotional influence can in fact be decisive, and was "designed" by natural selection to be that way.

Simply put, Wright's view (2006:95) is that if everyone were more aware of the ways emotion subtly biases their moral judgements, the world would be a better place, because we would be less likely to comply with these morally corrupting biases. Wright, therefore, sees some virtue in anything that makes people more self-aware in this regard. He also believes that using emotionally anthropomorphic language to describe certain aspects of chimpanzee social life – in addition to being defensible on purely scientific grounds – can have this effect. Taking note of how subtly, but powerfully, emotions can guide the behaviour of chimpanzees might help us see how subtly, but powerfully, emotions can influence our own behaviour, including behaviours that we like to view as products of pure reason (Wright 2006:96).

Wright (2006:96) is tempted to call this third theoretical orientation “naturalistic veneer theory”, since “it does see humans as often covering self-serving motives with a moralistic veneer, but sees the veneer-building process itself as genetically, not just culturally, grounded”. That description, however, has the shortcoming of not portraying that a lot of our natural moral impulses do have truly moral consequences. Combining “naturalistic” and “veneer” still gets us closer to the truth, in this context, than leaving these words by themselves (Wright 2006:97).

In Philip Kitcher's<sup>18</sup> review of De Waal's criticism against the Veneer Theory, he explains that the Veneer Theory divides the animal kingdom into two (2006:121):

There are nonhuman animals who lack any capacity for sympathy and kindness, and whose actions, to the extent that they can be understood as intentional at all, are the expression of selfish desires. There are also human beings, often driven by selfish impulses to be sure, but capable of rising above egoism to sympathize with others, to curb their baser tendencies, and to sacrifice their own interests for higher ideals.

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<sup>18</sup> Philip Stuart Kitcher is an American philosophy professor who specialises in the philosophy of science, the philosophy of biology, the philosophy of mathematics, the philosophy of literature, and, more recently, pragmatism. In 2011 Kitcher published a book outlining a naturalistic approach to ethics, *The Ethical Project* (Harvard University Press).

Members of the human species have the selfish dispositions that pervade the psychologically more complex parts of the rest of the animal world, but, as Kitcher (2006:122) states, they also have the ability to subdue these dispositions.

The version of the Veneer Theory Kitcher (2006:122) sketches, which is also the one that occupies De Waal, takes a specific view of the starting point and the end point. Simply put, back in the evolutionary past of humans, they had ancestors who lacked any capacity for sympathy and altruism. These ancestors are as recent as the common ancestors of human beings and chimpanzees. On the contrary, present human beings have ways of disciplining their selfish urges, and, according to Kitcher (2006:123), the theory thinks of morality as this collection of disciplinary strategies.

The real objection to the Veneer Theory in this form is that it has the starting point wrong. Kitcher (2006:123) mentions it is falsified by all the evidence De Waal has acquired about the other-directed tendencies of chimpanzees, bonobos and, to a lesser extent, other primates. Appreciating this point ought to be, according to Kitcher (2006:123), the first stage in an inquiry about the evolutionary history that links the psychological dispositions of our ancestors to the capacities that underlie our contemporary moral behaviour. Kitcher (2006:123) continues to argue that “De Waal demolishes his favoured version of Veneer Theory by being very clear about the starting point – that, after all, is a project to which he has devoted much of his life – but he is considerably less clear as to the nature of the terminus”. He mentions the vague talk about “building blocks” and “direct outgrowth” appears because De Waal has not thought as hard about the human phenomenon he takes to be expected or foreshadowed in chimpanzee social life.

Kitcher (2006:123) proposes a polar opposite of the Veneer Theory, which he labels the “Solid-to-the-Core Theory” (STCT). The STCT maintains that morality is essentially existent in the evolutionary ancestors of human beings. Possibly, in the peak of human socio-biology, as Kitcher (2006:123) calls it, some people were tempted to trifle with the STCT, assuming, for instance, that human morality are merely dispositions to avoid incest (and similar simple tendencies) and that these have evolutionary explanations that apply to a wide range of organisms. The STCT effectively takes the final point of the evolutionary process that yields human morality to be the same as



some pre-human starting point (Kitcher 2006:124). He argues it is neither more, nor less credible than the Veneer Theory as De Waal characterizes it. Therefore, all the interesting positions lie somewhere in between.

What is, according to Kitcher (2006:124), the least satisfactory about De Waal's standpoint is his substitution of vague language ("building blocks," "direct outgrowth") for any specific suggestions about what has descended and what has been modified<sup>19</sup>. Criticizing a view like his "Veneer Theory" (or like STCT) is not enough (Kitcher 2006:124).

Peter Singer<sup>20</sup> also responds to De Waal's critique on the Veneer Theory. De Waal shares a number of views with Singer (2006:140), which are mentioned in the following. Singer argues that the origins of morality are to be found in the non-human social mammals from which humans evolved<sup>21</sup>. He rejects the view that morality is a matter of culture, rather than biology, or that morality is uniquely human and entirely without roots in our evolutionary history. The development of kin altruism and reciprocal altruism are, as Singer suggests, much more central to our own morality than we recognize. He goes on to describe De Waal as someone so familiar with our primate relatives and who affirms, on the basis of that knowledge, the view that there is a great deal of continuity between the social behaviour of non-human animals and our own moral standards (Singer 2006:141).

According to Singer (2006:141), De Waal rightly rejects the view that all of human morality is "a cultural overlay, a thin veneer hiding an otherwise selfish and brutish nature". Yet, De Waal's dismissal of the Veneer Theory is too swift and he is too harsh

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<sup>19</sup> Kitcher (2006:124) is referring to Darwin's phrase "descent with modification" which captures two aspects of the evolutionary process: descent and modification.

<sup>20</sup> Peter Albert David Singer, is an Australian moral philosopher. He is the Ira W. DeCamp Professor of Bioethics at Princeton University, and a Laureate Professor at the Centre for Applied Philosophy and Public Ethics at the University of Melbourne. He specializes in applied ethics and approaches ethical issues from a secular, utilitarian perspective.

<sup>21</sup> In *The Expanding Circle*, published in 1981.

with some of its advocates. Singer (2006:141) is of the opinion that De Waal fails to give adequate weight to dissimilarities he himself acknowledges between human morality and primate social behaviour. Singer (2006:142), in explaining what De Waal gets right and wrong in his opinion, stresses the need to distinguish between the following two claims:

1. Human nature is inherently social and the roots of human ethics lie in the evolved psychological traits and patterns of behaviour that we share with other social mammals, especially primates.
2. All of human ethics derives from our evolved nature as social mammals.

According to Singer (2006:142), the first claim should be accepted and the second rejected. However, at times De Waal appears to accept both claims.

Singer (2006:142) refers to De Waal's criticism of T. H. Huxley, whom De Waal takes to be the inventor of the modern Veneer Theory. De Waal writes of "Huxley's curious dualism, which pits morality against nature and humanity against all other animals". Initially, Singer (2006:14) notes that:

There is nothing really "curious" about a dualism that has been a standard refrain in one strand – arguably the dominant strand – of Western ethics ever since Plato distinguished different parts of the soul, and likened human nature to a chariot with two horses whom the charioteer must control and make to work together.<sup>22</sup>

Kant<sup>23</sup> built the dualism into his metaphysics, suggesting that the human knowledge of the universal law of morality comes from human beings' nature as rational beings, whereas the desires of man – including the sympathetic concern for the welfare of others – comes from the physical nature of human beings (Singer 2006:142). It is a distinction that is obviously problematic, but as Singer (2006:142) mentions, it would be wrong to dismiss it too quickly. De Waal possibly thinks that Huxley's position is

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<sup>22</sup> Singer (2006:142) refers to Plato, *The Republic*, especially Books 4, 8, and 9; Phaedrus, 246b.

<sup>23</sup> Singer (2006:142) refers to Immanuel Kant, *Groundwork of the Metaphysics of Morals*, trans. Mary Gregor, Cambridge: Cambridge University Press, 1997, sec. III.

curious because he is a defender of Darwin and seems here to be departing from a strictly evolutionary approach to ethics. But Singer (2006:143), in reference to Darwin, notes in *The Descent of Man*, that [t]he moral sense perhaps affords the best and highest distinction between man and the lower animals”. Therefore, the differences between Huxley and Darwin on this issue are less clear-cut than De Waal suggests.

Taking De Waal’s own remarks on Edward Westermarck into account, it becomes clear that the problem the Veneer Theory seeks to address should not be lightly dismissed (Singer 2006:143). Westermarck is described by De Waal as “the first scholar to promote an integrated view including both humans and animals and both culture and evolution”. Perhaps “the most insightful part of Westermarck’s work”, in De Waal’s opinion, is that in which he tries to distinguish the specifically moral emotions from other emotions. Westermarck, De Waal tells us, “shows that there is more to these emotions than raw gut feeling” and explains that the difference between the moral feelings and “kindred non-moral emotions” is to be found in the “disinterestedness, apparent impartiality, and flavour of generality” shown by the former.

Singer (2006:145) argues, according to De Waal’s view that,

[o]n the one hand, we have an evolved nature, which we share with other primates, that gives rise to a morality based on kinship, reciprocity, and empathy with other members of one’s own group. On the other hand, the best way of capturing what is distinctive about the moral emotions is that they take an impartial perspective, which leads us to consider the interests of those outside our own group. So central to our current notion of morality is this, that De Waal himself says, as we have just seen, that it is only when we make these general, impartial judgments that we can really begin to speak of moral approval and disapproval.

The idea of this broadly impartial morality is not new. Nevertheless, as De Waal points out, the practice of this more impartial morality is “fragile”. Singer (2006:145) therefore asks, “doesn’t this conception come very close to saying that the impartial element of morality is a veneer, laid over our evolved nature?”.

The issue, then, is not so much whether we accept the Veneer Theory of morality, but rather how much of morality is veneer and how much is underlying structure. Singer (2006:151) concludes his critique with the statement that people who claim that all of morality is a veneer placed over a basically individualistic, selfish human nature, are inaccurate. However, a morality that goes beyond our own group and shows impartial concern for all human beings could well be seen as a veneer over the nature we share with other social mammals.

Christine M. Korsgaard<sup>24</sup>, like De Waal, does not find the Veneer Theory very tempting. Korsgaard (2006:99) provides the following explanation:

In philosophy, it is most naturally associated with a certain view of practical rationality and of how practical rationality is related to morality. According to this view, what it is rational to do, as well as what we naturally do, is to maximize the satisfaction of our own personal interests. Morality then enters the scene as a set of rules that constrain this maximizing activity. These rules may be based on what promotes the common good, rather than the individual's good. Or they may, as in deontological theories, be based on other considerations – justice, fairness, rights, or what have you. In either case, Veneer Theory holds that these constraints, which oppose our natural and rational tendency to pursue what is best for ourselves, and which are therefore unnatural, are all too easily broken through.

De Waal seems to accept the idea that it is rational to pursue your own best interests, however, he wants to reject the supplementary view that morality is unnatural (Korsgaard 2006:100). De Waal, therefore, tends to favour a sentimentalist or an emotion-based theory of morality.

According to Korsgaard (2006:100) there are a number of problems with the Veneer Theory, a point on which she agrees with De Waal. In the first place, Korsgaard

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<sup>24</sup> Christine Marion Korsgaard is an American philosopher and academic whose main scholarly interests are in moral philosophy and its history; the relation of issues in moral philosophy to issues in metaphysics, the philosophy of mind, and the theory of personal identity; the theory of personal relationships; and in normativity in general. Since 1991 she has been a professor at Harvard University, where she is now Arthur Kingsley Porter Professor of Philosophy. She has been described as "one of today's leading moral philosophers" because of her work in defence of Kantian views in moral theory.

(2006:100) argues that despite its popularity in the social sciences, the suitability of the principle of pursuing your own best interests as a principle of practical reason has never been established. She also points out that the notion that what people actually do is to pursue their own best interests is rather laughable.

In the second place, Korsgaard (2006:100) argues that it is not clear that the idea of self-interest is a well-formed concept when applied to an animal as richly social as a human being. Human beings' personal interests are not limited to having things. Humans also have interests in doing things and being things. According to Korsgaard (2006:100) many of these interests cannot set us solely against the interests of society, simply because they are incomprehensible outside of society and the cultural traditions that society supports. Even for having things there is a limit to the coherent pursuit of self-interest. And of course people also have genuine interests in certain other people, from whom their own interests cannot be separated. So the idea that people can clearly identify their own interests as something set apart from or over and against the interests of others is strained to say the least (Korsgaard 2006:100).

Korsgaard (2006:101) mentions there is an even bigger problem with the Veneer Theory. Morality, according to her, is not just a set of obstructions in the pursuit of our interests. Moral standards outline ways of relating to people that most of humanity, most of the time, find natural and welcome. Korsgaard (2006:102) also finds it absurd to think that non-human animals are motivated by self-interest. She explains that the concept of what is in your own best interests, if it makes any sense at all, requires a kind of grasp of the future and an ability to analyse that do not seem accessible to a non-human animal. Acting for the sake of your best interests also requires the capacity to be motivated by the abstract notion of your overall or long-term good. The idea of self-interest seems simply out of order when thinking about non-human action. With this opinion, Korsgaard (2006:102) does not deny that the other intelligent animals do things on purpose, but she would expect these purposes to be local and concrete – “to eat something, mate with someone, avoid punishment, have some fun, stop the fight” – but not to do what is in their best interest overall.

In Korsgaard's (2006:102) own words:

Nonhuman animals are not self-interested. It seems more likely that they are, in Harry Frankfurt's phrase, wanton: they act on the instinct or desire or emotion that comes uppermost. Learning and experience may change the order of their desires so that different ones come uppermost: the prospect of punishment may dampen an animal's ardour to the point where the animal will refrain from satisfying its appetite, but that is a different matter than calculating what is in your best interests and being motivated by a conception of your long-term good.

All of the reasons mentioned above proves why Korsgaard (2006:102) finds the Veneer Theory rather silly.

An evaluation of De Waal's critique on the Veneer Theory has now been discussed. The following section is a review of De Waal's more central and interesting question of the roots of morality in our evolved nature, where they are located and how deep they go.

### **4.3 BOTTOM-UP MORALITY**

Eric Michael Johnson<sup>25</sup> (2013:ad loc.) reviews De Waal's argument that human moral feelings have been shaped by natural selection. By viewing morality as a bottom-up process, emerging as an adaptation to social interactions over evolutionary time, Johnson (2013:ad loc.) argues that we can perhaps let go of absolutist religious hierarchies while still bearing in mind the principles that sustain and nurture a moral society.

While De Waal well and wisely shows that "morality" is not dependent on religion or even on humanity, Jack Eller (2013:ad loc.)<sup>26</sup> is of the opinion that he never really

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<sup>25</sup> Eric Michael Johnson received his Master's degree in evolutionary anthropology and pursued his dissertation on bonobo (*Pan paniscus*) behavioural ecology before switching fields to work on the history of evolutionary biology in late-19<sup>th</sup> century England, Europe and Russia.

<sup>26</sup> Jack David Eller is an Instructor of Anthropology at the University of Northern Colorado, with expertise in Cultural Anthropology, Historical Anthropology and Anthropological Linguistics.

defines what he means by morality. In reference to Nietzsche, Eller (2013:ad loc.), mentions that we do not stop to question the very concept of morality itself, to see morality as a “problem”. Eller (2013:ad loc.) is of the opinion that

Morality cannot only mean 'good' behaviour, because 'good' is relative. It cannot simply mean 'pro-social' behaviour, or least that is not what it means in practice: is same-sex marriage pro-social or antisocial? It cannot mean 'human flourishing,' since that idea includes things that no one would regard as 'moral' (like eating a nutritious diet) and does not specify either its units of measure (individual? family? country? species?) or any specific outcome (i.e., how do we know if we are flourishing, and how do we know if some other course of action might make us flourish more?).

The definition of morality that De Waal offers is, according to Eller (2013; ad loc.), also not too successful: "Morality is a system of rules concerning the two H's of Helping or at least not Hurting fellow human beings. It addresses the well-being of others and puts the community before the individual" (De Waal 2013:156). Eller provides a number of reasons to prove his point. Firstly, Eller (2013:ad loc.) argues that if morality is about human beings, then De Waal's whole case in support of pre-human morality crashes down. Secondly, he mentions that helping/hurting cannot be the one and only criterion of morality, mainly because it is too vague and relative (Eller 2013:ad loc.): “doesn't stem cell research help more humans than it hurts? And who is really hurt by gay marriage?” Finally, it is uncertain if it is true that morality puts the community ahead of the individual and which community De Waal is talking about. Eller (2013:ad loc.) thinks it is inadvisable to approach morality as “a system of rules” at all, something De Waal is not guilty of. Rather, De Waal roots morality in *emotion* and rightly finds that rules or “moral reasoning” often occur after the fact. He is of the opinion that emotion is too weak a foundation and too binary in its reason/emotion dichotomy.

In the end, Eller (2013:ad loc.) completely agrees with De Waal that non-selfish concerns and actions can be found in the non-human world. He also agrees that the principles of morality are pre-religious and pre-human, and that morality is all but as rational or absolute as we would like to think. If nothing else, Eller (2013:ad loc.) believes De Waal's work should stand for all time as the grounds for treating animals and the natural world with more kindness and respect.

Boomgaard (2008:695) mentions that in De Waal's view, it is credible that the common ancestor of humans, bonobos and chimps was a "moral" being in the sense that it may have shown altruistic and empathic features like the ones we find in those species today. Finding moral features in apes is a fairly recent phenomenon that has transformed our view of both these animals and the human species.

From the point of view of a historian with an interest in wild animals, Boomgaard (2006:695) postulates that the following criteria would influence the credibility of the above-mentioned hypothesis. It is first and foremost important to note that it was 5.5 million years ago that hominids branched off from that ancestor and that it is therefore extremely unlikely that we will find any direct evidence for or against De Waal's hypothesis. Evidence could be found of how our common ancestor dealt with its natural environment or what it ate, but there will probably not be too much more to learn about its behavioural patterns.

Secondly, we can be sure that humans have evolved in the past 5.5 million years. Boomgaard (2008:695) believes new evolutionary roads may have been opened by the development of speech and the capacity to make fire, two factors that most probably have changed early humans' way of life drastically. Therefore, these factors may have had some bearing on the types of behaviour that were at a premium, with all the moral implications that such changes might have entailed. According to Boomgaard (2008:695), climate change also must have led to alterations in human behaviour, several times over the last million years. Rising or dropping average sea levels and temperatures were certainly challenges that must have led to new patterns of evolutionary selection amongst hominids.

Present-day behaviour of apes is not necessarily the same as that of a few million years ago. If people have evolved, then so have apes. In Boomgaard's (2008:695) judgement, chimpanzees' present-day behaviour and morals cannot be inevitably projected backward a few million years unchanged. He explains that chimpanzees and other apes have been exposed to selective evolutionary pressures that were partly the same ones that humans were confronted with, for example, climate change. Direct information regarding the behavioural patterns of the hominids and apes of a few million years ago will probably never be available. The available direct knowledge of



human behavioural patterns from written texts is also not older than a few millennia. Boomgaard (2008:695), therefore, believes the gulf between our earliest knowledge of human morality and the knowledge required for testing De Waal's hypothesis is vast. A similar type of knowledge on the topic of animal behaviour is even more recent. Behavioural studies, either in the wild or zoos, are largely a post-World War II phenomenon (Boomgaard 2008:695). There is some older information, in some cases dating back a few 1000 years (e.g., Herodotus, Aristotle), but this is mostly anecdotal evidence of uncertain reliability and provenance and it seems to be largely restricted to only a few animals that captured the imagination of the ancients. So the gulf is even more extensive here.

De Waal is aware of most of these problems, but he does not mention them in his publication *Primates and Philosophers: How Morality Evolved* (Boomgaard 2008:696). In his book, *Our Inner Ape*, he briefly mentions complications posed by our lack of knowledge regarding the ancestors of humans and apes and the evolutionary processes that have taken place since they lived. Philip Kitcher (2006:136–39) also points to the fact that we should be dealing with humans and apes of long ago and not with our contemporaries if we want to test the statements of De Waal. Boomgaard (2008:696) is of the opinion that De Waal makes a credible case for his hypothesis, but, given the lack of historical evidence, it can be based only on a number of somewhat heroic assumptions.

In his *Primates and Philosophers: How Morality Evolved*, De Waal strongly suggests that considering non-human animals, in this case two species of apes, as moral beings is a new concept and his critics (Singer, Kitcher, Korsgaard and Wright) do not challenge this statement. De Waal emphasizes that philosophers and other scholars have always drawn attention to the differences between immoral or amoral animals and moral humans. Boomgaard (2008:696) reacts to De Waal's argument by making the following statement:

Human perception of the “closeness” between people and animals is not a constant. In early modern Europe there were always people – both laymen and scholars – who believed that people and (some) animals were close, so close, for instance, that they could mate and produce offspring. It was also not rare to ascribe religious feelings and

thus morality to certain animals. Perhaps the most conspicuous example of attributing moral qualities to animals is found in late-medieval trials of animals, such as pigs, that had transgressed seriously against people.

In a critical review of De Waal's work on morality, Strum<sup>27</sup> (2008:701) agrees with De Waal's evolutionary approach, which promotes continuity between human and non-human primates. She mentions that the transition from the non-human to the human condition is pure speculation and that she would add several factors to De Waal's list. Strum (2008:701) uses examples from baboons, where De Waal uses examples from chimpanzees and capuchin monkeys.

Social norms occur in baboons; they are first socially enacted and then individually appropriated. Strum (2008:701; see also Strum and Latour 1987) indicates one must shift the frame from high-level cognitive accomplishments to performative society, in order to see how this happens. Baboons express their "ought" stories by means of their bodies and their interactions, adjusting and reinforcing to social norms through actions. Strum (2008:701) offers two examples to illustrate her point:

One social norm is that one should not frighten infants. When a new immigrant male scares a baby, the troop mobs him. After that, he adjusts his behaviour or is mobbed again. This "ought" is the foundation for a social strategy called "agonistic buffering" (Strum 1983), whereby a male uses an infant to turn off the aggression of an opponent. Baboon friendships are the other example (Strum 1982, 1983; Smuts 1985). Such relationships are created, or "performed," and depend on subtle adjustments of expectations of exchange, including grooming, protection from aggressive group members, and sexual cooperation. Friendships between adult males and females can be initiated by either, and the friendship process has "oughts": what a male should do and what a female should do. Conformity with expectations creates and maintains the friendship; violations prevent or destroy it.

Therefore, baboons with simply a theory of behaviour, some social norms and their bodies create a sequence of social contracts based on the Golden Rule: do unto others

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<sup>27</sup> Shirley C. Strumm is in the Department of Anthropology at the University of California.

as you would want others to do unto you. But how does one achieve such a goal? Strum (2008:701) refers to Vygotsky (1978; also Wertsch 1985), who suggests that, in a performative society, difficulties are solved in social interaction before being appropriated by individuals; the flow of cognitive solutions goes from the social to the individual rather than the other way around.

Strum (2008:701) draws attention to the central role empathy plays in De Waal's evolutionary approach. Empathy concerns, according to De Waal (2006:98), "all processes leading to related emotional states in subject and object". The path to human morality is from empathy to sympathy, from automatic "emotional contagion" to cognitive empathy to "attribution" of the perspective of the "other". In the opinion of Strum (2008:702), relying on empathy creates a number of problems. The first problem she mentions is that empathy requires cognitive sophistication, which totally constrains the circumstances under which morality might evolve. Secondly, the position of empathy, as an emotion, in the evolution of human morality is problematic. Little is known about the role of emotions in behaviour, because according to Strum and Fedigan (2000:ad loc), emotions were a taboo topic for behaviourism and classical ethology. From an evolutionary perspective, however, emotions can be viewed as mechanisms that make an individual want to do what was evolutionarily important to do in the past. Strum (2008:702) therefore believes when cooperation, sharing, or reciprocity becomes an important behavioural adaptation, emotions develop as consequences rather than causes in the evolutionary process. Emotions only later motivate appropriate behaviour. It is in this context that gut reactions about fairness, punishment and trust develop. The antecedents of these complex social emotions should precede empathy as well (Strum 2007:702).

Human beings have prolonged moral consideration over and above the self, family and tribe. The evolution of ethics integrates region, nation, race and all humans. Strum (2008:702) states that they are currently struggling to include some animals and plants and Nash (1989) predicts that the trend will extend moral action to the rest of life, ecosystems and the planet. This evolution is based on the expansion of interaction networks in a human performative society and not on the extension of empathy. Empathy can motivate people to act in some cases, such as animal rights, but not in

many others. Many environmental ethicists have witnessed that humans rationalize their actions by developing moral arguments only after changes in behaviour.

So how do we get from animal to human morality? Strum (2008:702) disagrees with De Waal's framing of arguments in terms such as "good-natured" or "bad-natured". These type of dichotomies may be useful in philosophical discourse, but in today's science they are not useful at all. Human beings have always had a complex combination of options. A more developed morality is made both possible and necessary through new aspects of adaptation. At minimum, Strum (2008:702) believes, the preconditions for this morality would have included resources that could be shared and a lifestyle that puts a premium on cooperation. In addition, only human beings can monopolize vital resources and deny others what they need for survival. De Waal suggests that the highest principle of human morality is disinterested moral fairness, a focus on the greater good. Strum (2008:702) states there may be several routes to this end, including group selection, which now appears to be particularly applicable to humans. Her remark on the "several routes" raises anew the question on the "closeness" of humans to animals. It is, therefore, necessary to turn to De Waal's point on continuity between humans and other animals.

De Waal (2006:22) advocates a view of morality as an outgrowth of the social instincts. Such a view postulates continuity between human animals and animal social tendencies. Moral tendencies are seen as evolved. Korsgaard (2006:104) does not find a total gradualism between humans and other animals very tempting. Human beings seem undoubtedly set apart by their historical memory; elaborate cultures; and the practices of art, literature, philosophy, science and, of course, their languages with complex grammar and refined expressive power.

Korsgaard (2006:104) agrees with Freud and Nietzsche that "human beings seem psychologically damaged, in ways that suggest some deep break with nature". An old-fashioned philosophical project, dating back to Aristotle, attempts to locate the central dissimilarity that accounts for all these other differences between the other animals and human beings. A very old-fashioned philosopher, Korsgaard (2006:104) is tempted by that project. In her review of De Waal's work she sheds light on one piece

of that project that bears on the question of the extent to which morality represents a break with our animal past.

Korsgaard (2006:105) argues that moral standards regulate the way human beings act and that the question of the degree to which animals are moral or proto-moral beings arises because animals undoubtedly do act. De Waal's conclusions are mainly derived from considering what animals do. In his books, De Waal often portrays different possible intentional interpretations of animal behaviour and actions and describes experiments designed to find out which is correct. In the words of Korsgaard (2006:105),

[a] capuchin rejects a cucumber when her partner is offered a grape – is she protesting the unfairness, or is she just holding out for a grape? Do the chimps share food because they are grateful to those who have groomed them, or is it just that the grooming has put them in a relaxed and beneficent mood?

From time to time what appears to be evolutionary explanations of animal behaviour seem to flow over into intentional interpretations of their actions, such as when De Waal (1996:205) suggests in *Good Natured* that chimpanzees “strive for the kind of community that is in their own best interest”. For Korsgaard (2006:105), it seems difficult to believe that a chimpanzee has anything like a community that is in their own interest in their mind. However, in other cases, De Waal carefully separates the question of the extent to which monkeys and apes do the things he talks about intentionally or deliberately from the question of what explains their tendency to do them. De Waal himself chastises Veneer theorists for inferring the selfishness of our intentions from the “selfishness” of our genes.

The question of intention is a question about how an episode in which an animal does something looks from the acting animal's personal point of view, whether it is plausible to think that the animal acts with a certain kind of purpose in mind. Korsgaard (2006:106) notes that there is a temptation to think that the question whether one can see the origins of morality in animal behaviour depends on how exactly one interprets their intentions, whether their intentions are “good” or not. She argues, at least taken in the most obvious way, this outlook is a mistake.

Korsgaard (2006:106) is of the opinion that a kind of sentimentalist moral theory favoured by Hutcheson and Hume would be plausible, since according to these thinkers an action acquires its moral character from the fact that witnesses or onlookers would approve or disapprove of the action. Korsgaard (2006:107) offers the following elaboration on this point:

At least in the case of what Hume called “the natural virtues,” these thinkers believed that the agent who does a morally good thing need not be motivated by expressly moral considerations. In fact for this reason, some of the sentimentalists of the eighteenth century and their critics explicitly discussed the question whether according to their theories the other animals could be thought of as virtuous. Hutcheson’s immediate predecessor, Shaftesbury, had asserted that you could not count as virtuous unless you were capable of moral judgment, and that therefore we would not call a good horse virtuous. But since according to this sort of theory moral judgment need not play a role in moral motivation, it is not clear why not. Hutcheson therefore boldly asserted that it is not an absurdity to suppose that “creatures void of reflection” have some “low virtues.”

De Waal praises sentimentalist theories, however, he denies that his arguments rest simply on the existence of animals with intentions we approve of. De Waal (2006:16) states that whether animals are nice to one another is not the issue, nor does it matter much whether their behaviour fits the moral preferences of human beings. The appropriate question is rather whether animals possess capacity for reciprocity and revenge, for the enforcement of social rules, for the settlements of disputes and for sympathy and empathy.

Then again, De Waal seems to share one assumption with these early sentimentalists, namely that the morality of an action is a matter of content of the intention with which it is done. Korsgaard (2006:107), however, disagrees with this assumption and as an explanation, she takes a closer look at the concept of acting intentionally or on purpose. This concept, she believes, does not mark off a single phenomenon, but a number of things that can be ranged on a scale. It is only at a certain point on the scale that the question whether actions have a moral character can arise.

At the bottom of the scale, there is the notion of intentionally or functionally describable movement (Korsgaard 2006:107). In this form, the concept of intention applies to any object that has some sort of functional organization, including plants and machines and not only human beings and animals. Certain movements within the economy of a functionally organized object can be defined as having certain purposes. For example, the alarm rings to wake you up, or the heart beats to pump the blood. There is no suggestion that the purposes served by these actions are prior to the minds of the objects that move, or even prior to the minds of someone who created those objects. Ascribing purposes to these actions merely reflects the point that the object is functionally organized.

Korsgaard (2006:108) argues in the case of living things, especially animals, including the so-called “lower” animals, some of these intentional movements are guided by the animal’s perception. It is at this point that the temptation arises to use, as she calls it, the language of action, and it is quite clear why “when an animal’s movements are guided by her perceptions, they are under the control of her mind, and when they are under control of her mind, we are tempted to say that they are under the animal’s own control” (Korsgaard 2006:108).

This is what distinguishes an action from a mere movement: an action can be attributed to an agent and is done under the agent’s own control. Is it, at this level, appropriate to say that the animal acts intentionally, or on purpose? Korsgaard (2006:108) argues it depends on how the question is understood. Say, for instance, the animal is directing its movements and the movements are intentional – the movements have a purpose. In that sense the animal acts with a purpose, but there seems to be no reason to argue that this purpose is in some way before the animal’s mind. On the other hand, Korsgaard (2006:109) asserts that once we are dealing with an intelligent animal, there is no reason not to assume that its purpose is before mind.

Supposing there is a gradual continuum, Korsgaard (2006:109) maintains the following:

It seems right to say that an animal that can entertain his purposes before his mind, and perhaps even entertain thoughts about how to achieve those purposes, is exerting

a greater degree of conscious control over his own movements, and is therefore in a deeper sense an agent.

Once purposes are consciously entertained, the intentional portrayal of the action must capture something about the way it seems to the agent. According to Korsgaard (2006:110), the reason is because at this level we attach an intentional description to the agent's perspective, therefore, it makes sense to ask whether the capuchin is protesting the unfairness or merely angling for the grape<sup>28</sup>. The above-mentioned represents a more profound way in which an action may be understood to be "intentional".

Some philosophers do not, however, consider this the deepest level of intentionality. At the level of intentionality, Korsgaard (2006:110) believes the animal is aware of its purposes and thinks about how to pursue them. But the animal does not choose to pursue those purposes. The animal's purposes are given to it by their affective states: their emotions and instinctual or learned desires. Korsgaard (2006:110) states that

[e]ven in a case where the animal must choose between two purposes – say a male wants to mate a female but a larger male is coming and he wants to avoid a fight – the choice is made for him by the strength of his affective states. He has learned to fear the larger male more strongly than he desires to mate. The end that the animal pursues is determined for him by his desires and emotions.

This represents a more profound level of intentionality, because an agent who is capable of this form of assessment is capable of rejecting an action along with its purpose. This rejection is not because there is something else the agent wants, or fears even more, but merely because it judges the doing of that sort of act for that specific purpose as incorrect. Since we choose not only the means to our ends but also the ends themselves, this is intentionality at a deeper level. According to Korsgaard (2006:12) human beings exercise a deeper level of control over their own movements when they choose their own ends, as well as the means to them than non-

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<sup>28</sup> Two monkeys were paid unequally: Excerpt from Frans de Waal's TED Talk (2013); <http://www.youtube.com/watch?v=meiU6TxysCg>.



human animals. The reason for this is that non-human animals pursue ends that are given to them by their affective states, even if they pursue them consciously and intelligently.

Another way to describe the point is to say that humans do not merely have intentions, good or bad. They assess and adopt them. In other words, human beings have the capacity for normative self-government. It is at this level, according to Korsgaard (2006:112), that morality emerges. The morality of a human being's action is not a function of the content of their intentions. It is a function of the application of normative self-government. She proposes this as an answer to a question De Waal raises in *Good Natured* (1996:111): "What is different about the way we act that makes us, and not any other species, moral beings?".

Darwin speculates that the capacity for normative self-government arises from a difference in the way humans are affected by their social instincts and appetites (Korsgaard 2006:116). The effect of appetites on the mind is episodic and sharp, while that of social instincts is constant and calm. So once a social animal's mental faculties develop to the point where it can remember giving way to such temptations, they will seem not to have been worth it to the animal and it will eventually learn to control such impulses. The human capacity to be motivated by the imperious word "ought", Darwin suggests, has its roots in this kind of experience.

Korsgaard (2006:116) turns to another point of disagreement with De Waal. Kant (see Korsgaard 2006:116) speculates that the form of self-consciousness that underlies the human autonomy might also play a role in the explanation of some of the other distinctively human attributes, including culture, romantic love and the capacity to act from self-interest. If this argument is right, then the capacity for normative self-government and the deeper level of intentional control that goes with it is in all probability unique to human beings. And, as Korsgaard (2006:116) maintains, it is in the proper use of this capacity – the ability to form and act on judgements of what we ought to do – that the essence of morality lies, not in altruism or the pursuit of the greater good. As a result, she does not agree with De Waal when he states that "[i]nstead of merely ameliorating relations around us, as apes do, we have explicit teachings about the value of the community and the precedence it takes, or ought to

take, over individual interests. Humans go much further in all of this than the apes, which is why we have moral systems and apes do not” (Korsgaard 2006:54).

The difference here is not a mere matter of degree. The ability to be motivated by an “ought” is, as a matter of fact, a vast difference. A form of life directed by principles and values is a very different thing from a form of life governed by instinct, desire and emotion. Human beings have ideas about what we ought to do and be like and we are constantly trying to live up to them. Apes do not live in that manner. Human beings struggle to be truthful, polite, accountable and brave in challenging circumstances. Even though apes are sometimes polite, accountable and brave, it is most certainly not because they think they should be. Korsgaard (2006:117) is of the opinion that humans also suffer deeply from their self-evaluations and act in sick and evil ways as a result. This is part of what she meant when she said that human beings seem psychologically damaged in a way that suggests a break with nature. This, however, is not a way of saying that morality is a thin veneer on our animal nature. It is the exact opposite according to Korsgaard (2006:117); the distinctive character of human action gives us a whole different way of being in the world.

On De Waal’s view of the evolutionary roots of morality, Kitcher (2006:124) states that De Waal has been familiar with developments in evolutionary ethics during the past fifteen years, “a period in which the naive reductions favoured in sociobiological accounts have given way to proposals of an alliance between Darwin and Hume”. The sentimentalist tradition in ethical theory, in which, as De Waal rightly sees, Adam Smith deserves (at least) equal billing with Hume, has won increased favour with philosophers, as also mentioned by Korsgaard (2006:107). Evolutionary ethicists have felt the appeal of what Kitcher (2006:124) calls the “Hume-Smith lure”.

In brief terms, this “lure” points to the argument that chimpanzees (and other non-human primates) have the capacity for sympathy and subsequently have the core of the psychology essential for morality. Kitcher (2006:124) believes that in order to understand the difficulties concerning this “lure” the notion of psychological altruism needs to be explored. The types of psychological altruism that have been revealed by studies of primates must be recognized and it is essential to relate these dispositions to the moral sentiments invoked by Hume, Smith and their successors.

De Waal wants to recognize non-human primates as having not only egoistic dispositions and it is useful to think of “psychological altruism” as a general term for labelling these (Kitcher 2006:26). As Kitcher (2006:126) understands it, “psychological altruism is a complex notion that involves the adjustment of desires, intentions, and emotions in light of perceptions of the needs and wishes of others”. De Waal properly distinguishes the psychological conception from the biological notion of altruism, defined in terms of the promotion of others’ reproductive success at reproductive cost to oneself. More precisely, Kitcher (2006:127) mentions psychological altruism ought to be thought of in terms of the relation amongst psychological states in situations that vary according to the perception of another’s need or desire.

A distinction can be made between paternalistic and non-paternalistic altruism. Kitcher (2006:128) explains this distinction as follows: “Paternalistic altruism responds to the needs, rather than the wishes; non-paternalistic altruism does the reverse”. Besides the distinction between paternalistic and non-paternalistic altruism, he mentions the importance of recognizing four dimensions of altruism, that is, intensity, range, extent and skill<sup>29</sup>. Even if the complications of elaborating a similar approach to emotion and intention are ignored and even if the distinction between paternalistic and non-paternalistic altruism is disregarded, it is evident that psychological altruists come in an enormous array of types.

Kitcher (2006:129) attempts to emphasise how complex the notion of psychological altruism is and, subsequently, “how untenable the idea is that, once we know that nonhuman animals have capacities for psychological altruism, we can infer that they have the “building blocks” of morality, too”. The expiration of the Veneer Theory, as De Waal understands it, reveals that the evolutionary relatives of human beings belong somewhere in “altruism space” away from the point of complete selfish indifference. Kitcher (2006:129) states that until we have a richer view of the specific kinds of psychological altruism, non-human primates display, and until we know what kinds are

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<sup>29</sup> See Kitcher (2006:128), in *Primates and Philosophers: How Morality Evolved*, for an elaborate explanation of the four dimensions of altruism.

relevant to morality, it is hasty to claim that human morality is a “direct outgrowth” of tendencies these animals share.

De Waal has made a powerful case for the existence of some forms of psychological altruism in the non-human world. His best example, in Kitcher’s (2006:130) mind, is one he offered in *Good Natured*. He refers to the experiment of Jakie and Krom<sup>30</sup> (Arnhem chimpanzees) in which it becomes clear how one animal accommodates its behaviour to the perception of a wish, or a need, of another animal with whom it has often interacted. Kitcher (2006:131), however, finds other examples a lot less convincing:

Consider the capuchins, the cucumber, and the grape. When de Waal’s report of his experiments appeared, some enthusiasts were prepared to hail them as demonstrating a sense of fairness in nonhuman animals. I take a sense of fairness to involve psychological altruism, as I have understood it, for it depends on not being content with a situation one would have seen as satisfactory precisely because one recognizes that the needs of others haven’t been met. In fact, de Waal’s experimental study reveals no kind of psychological altruism, but simply an animal’s recognition of the possibility of a preferred reward that it has not received, and a protest that results from the selfish wish for that reward.

In Kitcher’s (2006:131) judgement, the most convincing examples of psychological altruism are those of the Jakie-Krom type, which are sufficient to illustrate that non-human animals are not invariably psychological egoists and, indeed, to presume that human beings are likely to share the same capacities and the same status.

How then should the notion be evaluated that the evolutionary relatives of humans have the “building blocks” of morality, that the moral practices and dispositions of humans are “direct outgrowths” of capacities shared with non-human animals? As Kitcher (2006:138) complained earlier, these phrases are too vague to be helpful. There definitely are significant continuities between human moral agents and chimpanzees: they share dispositions to psychological altruism without which any

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<sup>30</sup> See De Waal (1996:83).

honourably moral action would be impossible. But Kitcher (2006:138) suspects that between humans and their most recent common ancestor there have been some very significant evolutionary steps, including “the emergence of a capacity for normative guidance and self-control, the ability to speak and to discuss potential moral resources with one another, and about fifty thousand years (at least) of important cultural evolution”.

In any evaluation of our evolutionary history the continuities or discontinuities can be emphasized. Kitcher (2006:139) is under the impression that little is gained by either emphasis and it seems better to merely recognize what has endured and what has altered. Central to Kitcher’s (2006:139) argument is the notion that mere demonstration of some type of psychological altruism in chimpanzees (or other higher primates) shows very little about the origins or evolution of ethics. He happily hands over the Veneer Theory to the flames, save for the insights of Huxley. That, in Kitcher’s (2006:139) opinion, is only the start of making the many primatological insights De Waal has offered relevant to our understanding of human morality.

In the discussion of the secondary literature on De Waal’s notion of a bottom-up morality, it becomes clear that he has received both support and critique.

#### **4.4 CONCLUSION**

From the preceding discussion of De Waal’s view on the origin of morality, the following remarks can be made. The scholars’ opinions, featured in this critical evaluation, are mainly focussed on two of De Waal’s strongest opinions, which are present in almost all of his publications on morality. This includes his opinion on the Veneer Theory and the opinion that “morality [is] a direct outgrowth of the social instincts that we share with other animals” (De Waal 2006:6).

As mentioned by Joyce (2010:ad loc.), De Waal is an unparalleled source of rich first-hand primatological data, arguing convincingly that humans show continuity with other apes regarding empathy, reciprocal relations, consolation behaviour and peace making. Yet, De Waal admits these “building blocks” are “by no means sufficient” (De Waal 2006:20) for morality and he discusses two further levels of morality: rule

enforcement for the community's good and disinterested moral reasoning. De Waal, however, does not address whether this third, uniquely human, level is a distinct innate adaptation. According to Joyce (2010:ad loc.), De Waal apparently does not appreciate that "if it isn't [a distinct innate adaptation], and yet is necessary for being literally accorded a "moral sense" (as he seems to indicate on pp. 20, 49, 55), then moral nativism is false and at least some of human morality is veneer".

The comments of the four well-known scholars of morality, Robert Wright, Philip Kitcher, Christine Korsgaard and Peter Singer, on De Waal's Tanner Lectures provide alternative views and introduce other conceptual distinctions. These commentaries, with a response by De Waal, constitute an exceptional feature of his publication, *Primates and Philosophers: How Morality Evolved* (2006).

According to Strum (2008:701), the dialogue on human morality between De Waal and the four philosophers highlights a historical reality. She states that formal Western philosophy began as the science of the classical world and was a great improvement on mere opinion. Today's science does indeed benefit from influential new theories and methods and a previously unimagined wealth of empirical data. But, as Strum (2008:701) believes, philosophy's long tradition of convincing and vigorous argumentation can contribute to the final step in any science: the best way to interpret results. The philosophers in dialogue with De Waal give scientists a lot to think about as they venture into speculation.

All four of the above-mentioned commentators agree that the Veneer Theory in its suggested form must be rejected, but they also redefine it in a more elaborate form and introduce crucial distinctions that cut across the divide between De Waal's naturalistic approach and the Veneer Theory. De Waal classified Wright, who opens the discussion, as an advocate of the Veneer Theory. Wright, however, prefers the label "naturalistic Veneer Theory", in an effort to find a middle ground. Although Wright agrees that human morality is not a cultural overlay and that human moral intuitions are biologically rooted, he stresses the influence of emotions, which do not always function in favour of moral behaviour. Human beings may think that their moral judgements are purely rational, but they are often rationalizations of emotional imperatives.

Kitcher is convinced by De Waal's examples indicating that non-human primates are capable of psychological altruism. He does, however, regard the question of what types of altruistic dispositions those primates possess as crucial. Specifically, Kitcher raises awareness of the notion that attributing some altruistic dispositions to animals is not the equivalent of saying that animals act morally. Dispositions such as sympathy may be necessary for moral behaviour, but they are not sufficient and must be distinguished from genuinely moral sentiments. As Kitcher notes, de Waal is very clear about the starting point of our morality but seems unwilling to think much about its terminus.

Following the argument of Korsgaard, the core of morality is grounding our actions on normative moral judgments. In other words, the core of morality is based on reasoning about what one ought to do. Subsequently, she sees more discontinuity than continuity between the social behaviour of animals and the human-specific ability to subdue one's actions to general normative principles. Social behaviour of animals are directed by desire, emotion and altruistic instinct. Therefore, like Kitcher, Korsgaard moves the focus from the question of whether morality has its roots in nature to the core characteristics of morality itself.

Christine Korsgaard's attempt to defend the idea that there is a significant leap between chimp and human morality is both unnecessary and rather out of step with the available science. It is unnecessary, because De Waal has most certainly not denied that there are significant differences between humans and our closest relatives, both emotionally and, more important, cognitively. De Waal (2013:27), after all, states that he is "reluctant to call a chimpanzee a 'moral being'". This is a category De Waal reserves for humans who "strive for a logically coherent system". Other animals are driven primarily by that which affects them directly, but humans "move toward universal standards combined with an elaborate system of justification, monitoring, and punishment". Yet, De Waal's point is that while there is a difference between chimpanzees or bonobos and humans, there is also a strong connection.

It is important to note that De Waal is not suggesting that human beings follow the bonobo's social system. Evolution has given humans their own way of handling these things, De Waal (2013:104) mentions. He does, however, insist that ideas like

compassion and empathy are far from being unique to our species. “Morality predates religion”, De Waal (2013:280) says and “...we humans were plenty moral when we still roamed the savanna in small bands. Only when the scale of society began to grow and rules of reciprocity and reputation began to falter did a moralizing God become necessary”. However, just because the distance is great, it does not invalidate De Waal’s main point that the building blocks for human morality have been put into place during a process of biological evolution.

Singer is considerate to the De Waal’s rejection of the Veneer Theory. He does, however, think that more emphasis should be placed on the dissimilarities between humans and other animals. Singer advocates the exploration of how much human moral behaviour originates in culture and how much is due to their evolved nature. He stresses that it is a vital step from a “morality” grounded in reciprocity and empathic concern with one’s own group, which De Waal sees as a characteristic of the social life of non-human primates, to a genuine morality that reaches beyond the group. Singer believes expanding the circle of morality in this way is not an accomplishment of the evolved nature shared with our primate relatives, but of human history.

De Waal’s overall theoretical conclusions, however, are not as challenging as his specific scientific claims. On the one hand, he confines himself to arguing that human moral systems “underline pre-existing capacities”, and that human morality “elaborates upon pre-existing tendencies” (De Waal 2006:181). On the other hand, he hastens to stress the “uniquely human complexity of a disinterested concern for others and for society as a whole” (De Waal 2006:55), as well as the ethical priority of human interests. This persisting emphasis on human uniqueness, moreover, does not seem sufficient to his respondents, who, with the notable and foreseeable exception of Peter Singer, feel the need to reaffirm human special moral worth even more drastically. De Waal, however, not only responds to these comments, he also uses them to develop a layered model of human morality that emphasizes both similarities and dissimilarities between humans and other animals.

What De Waal’s hypothesis on the origin of morality would look like if he had taken into account the complications posed by our lack of knowledge regarding the ancestors of humans and apes and the evolutionary processes that have taken place



since they lived is unclear. Boomgaard, as well as Kitcher mentions that we should be dealing with humans and apes of long ago and not with our contemporaries if we want to test De Waal's statements.

King (2010:ad loc.) is clear about the fact that she does not agree with every word De Waal writes about a bottom-up morality. She does, however, agree (as does this research) that the core of De Waal's argument is accurate, both because he puts emotions front and centre in his account of human morality and because he explains how that morality emerges from animal roots.

De Waal's view on the origin of morality, as discussed in Chapter 3, provides a framework that identifies the foundation of human morality in the social instincts of non-human primates. It also provides guidance on the levels of morality unique to humans. De Waal's work provides multiple perspectives on the topic of morality and should, therefore, become a core text for anyone studying the origin of morality.

## CHAPTER 5

### 5.1 CONCLUSION

An evolutionary biological perspective on the origin of morality is the focus of this study, which stresses that a firmer grip on the origin of morality can provide us with a clearer understanding of what it means to be human. As mentioned earlier, in the discussion of important ethical issues, it is of utmost importance to keep a clear understanding of embodied existence in mind.

The research on De Waal's view of the origin of morality started with a chapter on the modern discourse about the origin of morality. It consists of an exposition of three perspectives on the origin of morality, of which the contribution of influential representatives of each one of these perspectives was examined. These three perspectives – evolutionary biological, philosophical and theological – each offers an insightful contribution to the exploration of the origin of morality. These three perspectives are the most important perspectives on the origin of morality<sup>31</sup>. The representatives in the philosophical perspective are Richard Joyce and Maxine Sheets-Johnstone. The theological perspective focuses on the work done of Stephen J. Pope and John F. Haught. An evolutionary biological perspective is explored through an overview of E.O. Wilson's opinion on the origin of morality. The study of the literature on these perspectives point to the necessity of a multi-disciplinary perspective on the origin of morality. In the following the core of each of these

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<sup>31</sup> Refer to the article written on the applicability of developmental psychologist Lawrence Kohlberg's theory of moral reasoning in the South African context. According to Subjee (2013:14) Kohlberg's theory of moral development, ultimately, presents an understanding of morality by linking it to cognition, providing support for Piaget's theory, while at the same time elaborating more on the actual nature of morality through the use of his six stages. Even though his theory is commonly accepted in the Western context, research proposes that his theory is lacking in its regard for cross-cultural factors. In the South African context, Kohlberg's theory does not seem to be as applicable as it is in more westernised countries (Subjee 2013:14). This points to possible limitations in developmental psychological perspectives on the origin of morality, which could be explored in further research.

viewpoints will be briefly stated, starting with that of Wilson, then Joyce and Sheets-Johnstone, and finally Pope and Haught.

Wilson believes the origin of morality should be studied with the help of the natural sciences. He leans on the neurobiological sciences to get more insight into the origin of empathy and altruistic behaviour. According to Wilson altruism does not come from kin selection. It is, however, based on the biological instinct to promote the wellbeing of the group. De Waal differs from Wilson, as he is of the opinion that altruism is a product of group selection.

From a philosophical perspective, Joyce, stresses the importance of moral judgement in participating in reciprocal behaviour. Joyce concludes that there is not a specific gene for morality. Morality is mostly complicated and vague, and moral judgment implicates, without a doubt, many different psychological and neurological mechanisms. These warnings against simplistic thought does, however, not lead to the disregard of Joyce's hypothesis that moral thought is biologically determined. Sheets-Johnstone aims to understand the origin of morality by affective impression and empathy. She, in the same manner as De Waal, develops a type of bottom-up understanding of morality which is grounded in the character of human nature. An evolutionary approach to understanding the origin of morality implies, for Sheets-Johnstone, a phenomenological investigation of human experience. It, therefore, requires an exploration of the ontogenetic origin of people, experiences of the embodied human psyche and of the basic facets of embodied human existence. A morality that flows from an investigation into the fundamental evolutionary reality of human nature is implied. Sheets-Johnstone articulates a multi-disciplinary and layered understanding of human morality that is ultimately grounded in a natural history of morality.

Haught and Pope are two of the very few theologians engaging in a dialogue with evolutionary biology on the origin of morality. Pope is quite clear about his viewpoint that the origin of morality should not be explained either biologically or theologically. He motivates this view with a perspective which combines evolutionary theory in a trustworthy way with theology. With such a perspective there can be left room for the possibility that God works through the intrinsic order of human nature. Haught believes

a pure evolutionary naturalistic explanation cannot be given for the origin of morality. Although a naturalistic perspective is highly valuable, it is still inadequate. Haught prefers to link the origin of morality to the three levels of moral development. A specific view of God on each level plays a forming role in the individual's development. According to Haught man's sense of morality is dependent on the cognitive level – to be responsible. A suitable foundation for the imperative and, therefore, morality is only possible from a perspective on reality that takes a theological understanding seriously.

Pope mentions that a chastened and balanced approach to the evolutionary roots of morality examined by scientifically informed sources is compatible with Christian ethics. It also helps to shed light on the human nature that is divinely created, habituated in the moral life, denigrated by sin and healed by grace. Haught agrees with Pope that evolutionary and other scientific declarations should be part of any appropriate understanding of morality.

All of the aforementioned perspectives aim to offer an integrated approach to the origin of morality. In the case of a theological perspective on morality it is especially necessary to involve the insights of the evolutionary biological perspective for the following reasons.

Morality and evolution were seen as irreconcilable during the 1970s and 1980s. De Waal points to the new interest in the evolutionary approaches to morality in the past decade. He is of the opinion that morality possibly has and requires an evolutionary explanation. Reason is set against emotion in a parallel debate that arises in the exploration of the origin of morality. This gave rise to two different schools of thought on the roots of morality. One of these schools of thought, also known as the Veneer Theory, regards morality as a cultural innovation that can only be achieved by the human race. Moral tendency, according to this view, is not seen as part of human nature and our ancestors was moral by choice. The Veneer Theory, according to De Waal (2006:6) accepts that human beings are not really moral. Morality is, therefore, seen as a type of cultural covering over an otherwise selfish nature. Until recently, the Veneer Theory was seen as the dominant approach to morality. The second school of thought, in contrast to the Veneer Theory's viewpoint, believes morality is the direct outgrowth of social instincts human beings share with other animals. Morality is neither

uniquely human nor a conscious decision taken in a specific time. According to De Waal this school of thought regards morality as a product of social evolution.

De Waal's attack against the Veneer Theory has led to extensive criticism against his view. Wright believes De Waal misunderstands the perspective of some people he labels "Veneer theorists." According to Kitcher, De Waal discredits his own favoured version of the Veneer Theory. Whilst being very clear about the starting point, De Waal is not very clear about the nature of the terminus. Kitcher, however, proposes a polar opposite of the Veneer Theory, which he calls the "Solid-to-the-Core Theory". Singer believes De Waal's dismissal of the Veneer Theory is too swift and that he is too harsh with some of its advocates. The issue, according to Singer, is not so much whether we accept the Veneer Theory of morality, but rather how much of morality is veneer and how much is underlying structure. Korsgaard finds the Veneer Theory to be rather silly for a number of reasons, some of which are in agreement with De Waal's view.

De Waal, in the exploration of the origin of morality, views the underlying capacities as far more important than the actual behaviour. De Waal mentions that empathy and reciprocal behaviour are the chief prerequisite or "building block" of morality. They are essential, even though they are unable to produce morality. It is hard to imagine a society without reciprocal exchange and emotional interest in others. De Waal believes it provides a concrete starting point to study the continuity Darwin had in mind. Kitcher criticizes De Waal's substitution of vague language ("building blocks," "direct outgrowth") for any specific suggestions about what has descended and what has been modified. However, the debate around the first school of thought or Veneer Theory is fundamental to this study because some evolutionary biologists differ strongly from the idea of continuity. They present morality as pretence, so complex that only human beings had the capability to be moral.

On the contrary, De Waal's personal argument centres on the continuity between human social instincts and those of our closest related species, the apes. He is of the opinion that we are standing at the brink of a much larger shift in theorizing that will end up positioning morality steadfastly within the emotional core of human nature. The study of De Waal's view on the origin of morality unfolds with a few critical points of focus in his work. These focus points include De Waal's perspective on the origin of

empathy, the “is” and “ought” distinction, De Waal’s tower of morality as well as his bottom-up view of morality.

Animals helping one another is not a new observation. De Waal goes on to explain that there are two main theories in this regard. The first theory states that helping behaviour has evolved in order to help genetically-related individuals and it resulted in the promotion of the helper’s own genes. The second theory holds that animals take part in helping behaviour for the sake of mutual benefit. If animals help those who return the favour, both parties will stand to benefit. De Waal notes that both theories involve the evolution of behaviour, but their actual motives remains unclear. Motives spring from the present whereas evolution rests on the success of a trait over many years. Altruistic behaviour is a commonality in human beings and other social animals and De Waal is of the opinion that the source of altruistic tendencies is the helping of kin and reciprocity.

De Waal mentions, as evident in Chapter 4, that psychologists and biologists often differ of opinion concerning the origin of empathy. Psychologists sometimes put our most advanced traits on a pedestal, ignoring or even denying simpler antecedents. Biologists, on the other hand, prefer bottom-up accounts over top-down whilst undeniably leaving room for the latter. Culture and language, for example, shape expressions of empathy. De Waal draws attention to the fundamental distinction between “shaping” and “being the origin of”. That being said, De Waal argues that empathy is the original, pre-linguistic form of inter-individual linkage that only secondarily has come under the influence of language and culture. Bottom-up accounts, therefore, assume continuity between past and present, human and animal, child and adult, and even between humans and the most primitive mammals. Empathy, at its simplest, is the ability to be affected by the state of another individual or creature. Empathetic behaviour is second nature to people. Sympathy, empathy and their expression in psychological altruism, exists a tight relation to human behaviour. It is therefore, in De Waal’s opinion, sensible to assume that the caring and altruistic reactions of other animals, especially mammals, rest on comparable mechanisms.

Kitcher mentions that De Waal correctly makes a distinction between the psychological conception and the biological notion of altruism. It is defined in terms of the promotion of others' reproductive success at reproductive cost to oneself. The complexity of the notion of psychological altruism is, however, stressed by Kitcher. He consequently mentions that one cannot simply assume that animals have the "building blocks" of morality, once it is known that non-human animals have capacities for psychological altruism. The notions that the evolutionary relatives of humans have the "building blocks" of morality and that the moral practices and dispositions of humans are "direct outgrowths" of capacities shared with non-human animals, are too vague to be helpful. There definitely are significant continuities between human moral agents and non-human animals. But Kitcher, however, believes that between humans and their most recent common ancestor there have been some very significant evolutionary steps.

De Waal developed a Russian Doll Model representing how simple and more complex forms of empathy are related. De Waal mentions that this model does not discredit higher cognitive levels of empathy. All empathy can most certainly not be reduced to emotional contagion. The Russian Doll Model holds that empathy covers all processes leading to related emotional states in both subject and object. The Russian Doll Model proposes that outer layers require inner ones. De Waal's view on empathy emphasizes that it is not an all-or-nothing phenomenon. It appears reasonable to first try and understand the basic forms of empathy before focussing the variations that cognitive evolution has built on top of this foundation. Strum, however, argues that De Waal's big emphasis on empathy could be rather problematic. Empathy calls for cognitive sophistication, which completely limits the circumstances under which morality might evolve. The position of empathy, as an emotion, in the evolution of human morality is also problematic, as too little is known about the role of emotions in behaviour.

De Waal has a rather strong opinion on the so-called is/ought distinction. This division is viewed by De Waal as one of the most frustrating difficulties facing attempts to root morality in biology. The evolution of behaviour lacks the normative character of morality ("ought"), and consists entirely of descriptions of how things came about ("is"). Therefore, taking an evolutionary approach to behaviour is sometimes considered irrelevant. De Waal asks the question: "What if biology informs us of the "ought" side of the division and consequently provides us with an explanation for the values we

pursue and the evolutionary reason behind such values?”. Biology would then not only be placed on the “is” side of the division. Survival and reproduction are part of certain outcomes that all organisms strive for. Social outcomes, close to those supported by human morality, are also pursued by many organisms.

One can now argue that the behaviour of other animals is normative because it seeks certain outcomes, but De Waal believes they seek these outcomes without normative judgement. Normativity can be defined as the devotion to an ideal or standard and animal behaviour is not free from it. De Waal questions whether animals do the same in terms of society at large and social relations. In an attempt to answer this question, De Waal examines the notions of social hierarchy and impulse control, one-on-one normativity and community concern.

De Waal has a rather uncommon view of morality that involves either *Helping* or (*not*) *Hurting*. Helping or (*not*) Hurting are intertwined. According to De Waal anything dissimilar to Helping or (*not*) Hurting cannot be associated with morality, even though it is proposed as a moral concern. Morality regularly puts community interests before those of the individual and addresses the well-being of others. Self-interest is not denied, but limited in order to promote a cooperative society. It is, according to De Waal, this functional definition that sets morality apart from habits and eating with lifestyle practices, such as eating with a knife and a fork versus eating with bare hands. The distinction between moral rules and conventions can be detected at a very young age. This rather uncommon view of morality as Helping or (*not*) Hurting offered by De Waal is, according to Eller, not too successful. Eller maintains that if morality is about human beings, then De Waal's whole case in support of pre-human morality falls apart. He mentions that Helping or (*not*) Hurting is too vague and relative to be the one and only criterion of morality.

De Waal further distinguishes between two levels of moral rules. The first level, one-on-one normativity, concerns social relationships, whilst the second level is rules at community level. One-on-one normativity mirrors an understanding of how an individual's own behaviour affects others. De Waal maintains that human beings share this level of moral rules with other social animals, which develop comparable inhibitions and codes of behaviour. The protection of valued relationships is the centre



around which the one-on-one level revolves. Personal interests are not denied on the level of community concern. The goal, however, is to rather achieve harmony within the larger community. It is at this level, according to De Waal, that human morality differs from anything encountered thus far. Community concern simply refers to individuals advancing the interests of their own community as a whole and that might as well be to their own benefit. Group selection and sacrifice are not implied by community concern.

De Waal argues that the notion that biology and animal behaviour are located solely on the “is” side of the is/ought divide is not easily supportable. It is possible, of course, to describe animal and human behaviour without any reference to goals, values and intentions. With reference to the above-mentioned, the gulf between primate behaviour and human moral norms is much narrower than commonly thought. The occurrence of differences, however, are not denied.

On De Waal’s view of continuity between humans and other animals, Korsgaard responds by mentioning that she does not find a total gradualism between humans and other animals very tempting. We seem unquestionably set apart by our historical memory; elaborate cultures; the practices of art, literature, philosophy, science; and our languages with enormously complex grammars and refined expressive power. She argues that the ability to be motivated by an “ought” is an enormous difference.

Taking the suggestions made by some of his critics, to consider taking discontinuities into account, De Waal is of opinion that evolution does not occur in leaps. Closely-related species only differ gradually, because modified old traits result in new traits. Human morality, representing a noteworthy step forward, barely breaks with the past. De Waal also firmly believes that anything unrelated to the two Hs falls outside morality. In explaining the expanding circle of human morality, De Waal developed the concept of the *Floating Pyramids*. Altruism is guaranteed by what an individual can afford. The circle of morality can only reach farther if the survival and health of the innermost circles are secure. The available resources provide the force lifting the pyramid out of the water, whilst the extent of moral inclusion is reflected by the size above the surface. The wider the network of aid and obligation, the higher the pyramid rises.

In the view of De Waal, people are not born with any specific moral norms in mind. They are, however, born with a learning agenda that tells them which information to absorb. De Waal is of the opinion that human morality can be divided into three distinct levels. All of human morality is continuous with primate sociality, since the upper levels cannot exist without the lower levels. De Waal describes the first level of morality as the level of moral sentiments, or the psychological “building blocks” of morality, which received some critique from Kitcher. A second level of morality refers to the social pressure put onto every member of the community to contribute to common goals and uphold agreed-upon social rules. This level is not entirely absent in other primates. The third level of judgement and reasoning concerns the internalization of the needs and goals of others to the degree that these needs and goals figure in an individual’s judgement of behaviour. This level is uniquely human.

De Waal advocates a bottom-up view of morality. He bears in mind the fact that everything started simple, which is true for our bodies, minds and behaviour. De Waal is of the opinion that religion drilled into our minds the belief that morality is somehow forced upon us from above. This view is also embraced by philosophy, which is evident in Chapter 4. This belief is in clear contrast to what modern sciences make known about other animals and the predominance of emotions and intuitions. In other words, if the world lost its religion and embraced a humanist ethical system, there is no reason to assume that earth will become a bloodbath. Humans do not decide to be empathetic, they just are, according to De Waal. With his bottom-up view of morality De Waal emphasizes that the moral law is not imposed from above or derived from well-reasoned principles. It does, however, arise from ingrained values that have been there since the beginning of time.

There is, however, a level of morality that distinguishes us from other non-human animals. Humans show intense care about the group level, resulting in the development of notions of right and wrong for everyone around and not just the individual or close relations. This level of morality involves greater powers of abstraction and anticipation of what may happen if we allow others to get away with behaviour that does not necessarily affect us. The impact of this behaviour on the greater good can be imagined through our capacity for imagination. There is no need for morality to only be applied to within-group contexts, even though there is no doubt

that morality evolved for within-group reasons without much consideration for humanity at large.

To conclude, De Waal mentions the necessity of a biological perspective on morality. The main building blocks or prerequisites of morality are empathy and reciprocity. A moral society is characterised by mutual exchange and emotional interest in other people. De Waal does not deem it necessary to explain moral tendencies with relation to group selection, but emphasises the importance of the capacities underlying behaviour, a distinction Darwin could have noted by looking past behaviour to underlying emotions, intentions and capacities. The relevant question is whether non-human animals have the capacity for reciprocity and revenge, for the implementing of social rules, for the settlement of disputes and for sympathy and empathy. De Waal builds his personal argument for the origin of morality on the continuity between human social instincts and those of our closest related species, the apes. When asked “if animals are moral?” De Waal simply concludes that they inhabit several floors of the tower of morality. He firmly believes the denial of even this modest proposal can only result in an impoverished view of the structure as a whole.

The major challenge in the search for a better understanding of the origin of morality, is to move forward, beyond religion, and especially beyond a top-down morality, which De Waal also notes. Haught and Pope’s view that a pure evolutionary naturalistic explanation cannot be given for the origin of morality also holds value, however. As Pope mentions, the set of scientific hypotheses and insights regarding the evolutionary basis of morality does not render a religious interpretation impossible, including the notion that God orders the world by evolutionary processes. De Waal argues that currently we seem to be in the middle of a process moving beyond a singular approach to morality. Philosophers, for example, are not pushed aside, rather they are included, so that the evolutionary basis of human morality can be clarified from a variety of disciplinary angles.

An evolutionary biological perspective is of immense importance in studying the origin of morality. As Sheets-Johnstone declares, real ethics rest on a credible understanding of what it means to be human, and, therefore, an understanding of morality that is rooted in the character of human nature. An evolutionary biological

perspective expresses a morality that comes from within, rather than without, or as De Waal labels it, a bottom-up morality. Studying the origin of morality from an evolutionary biological perspective, therefore, does not go forth from, amongst others, a consideration of rules, moral judgements, moral status, moral agency, responsibilities or rights.

The challenge is how differently ethical issues will be approached with a deepened understanding of morality, rooted in nature. Holding a bottom-up view of morality, our approach to the banning of artificial insemination, forced marriages of adolescent girls and judgement of homosexuality, to name a few, would be different. When studying morality from a multi-disciplinary approach, combining science with theology, new answers might be found to the truly important questions of moral reasoning. With regards to difficult issues, as mentioned above, Christian ethics can be reconceptualised responsibly from the evolutionary biology. Theology should take the evolutionary biological perspective on morality seriously in order to practice responsible ethics. Evolutionary biology can also benefit from theology, as Haught stresses the important contribution theology can make to the evolutionary biological approach to morality.

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