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An Interrogation of the Selfishness Paradigm in Sociobiology Including its Explanations of Altruism and a Response to its Interpretation of New Testament Love

Thesis submitted in accordance with the requirements of the
University of Liverpool for the degree of Doctor in Philosophy

by Lisa Marguerite Denise Goddard

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For the one who emptied
himself for our sakes

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Abstract

This thesis is a response to the sociobiological paradigm which sees all aspects of life as fundamentally 'selfish'. This view is built upon two concepts, firstly, that the evolutionary process of natural selection leads to a world characterised by 'selfish' genes and 'selfish' individual organisms. Secondly, that all aspects of human nature, including benevolence, are defined by natural selection and are consequently selfish in motivation also. In Chapter 2, the first of these ideas is shown as inappropriate, not least, because selection favours genes that 'cooperate' and individuals that 'sacrificially' expend themselves in producing offspring. In Chapter 3, the second concept is discounted as only some aspects of human behaviour and culture can be explained in terms of natural selection. These points are central to the discussions on 'altruism' in Chapters 4-6. While sociobiologists have rightly noted that kin and reciprocal forms of 'altruism' occur in nature and in human society, their rendering of them in terms of genetic and individual 'selfishness' is again entirely misleading. The arguments of some sociobiologists for group selected forms of 'altruism' in nature and human culture are shown as unconvincing. Further, the sociobiological contention that human benevolence is constrained to the aiding of kin, reciprocal partners and group members is also countered. Humans exhibit the capacity to care for those outside of these sociobiological categories. Moreover, rather than being primarily selfish in motivation, humans are both more altruistic and more egoistic than the sociobiological view can accommodate.

Chapter 7 considers the sociobiological interpretation of the New Testament (NT) teachings on love as selfishly concerned only with the care of kin, reciprocators and group members. This view is largely acceded to by the theologian, Stephen Pope, while another, Patricia Williams, has argued that the NT directly strives to counter such innate forms of behaviour. Chapters 8-10 investigate some of the NT teachings on love and argue for a more profound and complex altruism than any of these views. Chapter 8 contends

that NT love is a deeply humble and sacrificial altruism where the needs of the other are placed before those of the self; one that is patterned after the example of Christ. It is a radical altruism, which as Chapter 9 argues, encompasses kin but also goes beyond this category in the requirement to love the new family of believers. This love of the group, the church, is itself transcended in a love for *all* others. Chapter 10 argues that this NT altruism is not bound by reciprocity for it prioritises the care of the weak, those who cannot reciprocate; and extends love to enemies, those who will not reciprocate. The view that such a love is ultimately reciprocal on the grounds of its heavenly reward is countered, as the NT reward of love is the promise that the believer's capacity for self-giving love will be perfected.

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Chapter 1: Introduction

1.1 Sociobiology and its Theological Implications

Sociobiology is a discipline within biology that seeks to formulate a systematic description of biological existence on the grounds of the evolutionary process of natural selection. In its approach, the behaviours of organisms, and the genes that underlie them, are understood in terms of the selection outcome of adaptive advantage. The paradigm is a compounding of the theory of natural selection put forward by Charles Darwin (Darwin 1988 [1859]: 60-62), along with the recent knowledge gained in modern genetics and the zoological observations of animal behaviour. It is a composite subject of key aspects of biology and one that has garnered many important and truthful insights for biological science. It has rightly presented the view that selection favours behaviours and their constituent genes that increase the reproductive ability (generation of progeny) of individual organisms (Alcock 2001: 24).[1] Sociobiology has also made a significant contribution to delineating the forms in which 'altruism'[2] exists in nature and their explanations in terms of natural selection. It has shown that natural selection can account for the instances when individual organisms aid others who are kin (genetic relatives) and reciprocators with whom the individual is 'cooperating' for some shared benefit (usually food). More recently, arguments have been proffered by some sociobiologists for selection explanations of group 'altruism', where the individual assists those who belong to the group.

Despite its many insights, Sociobiology has also been the subject of much debate and controversy. The main reason for this is the sociobiological view that all aspects of human nature, whether behaviour or culture, are explicable

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[1] This concept is explained in some depth in Chapter 2.

[2] Terms such as 'altruism' and 'selfishness' will appear in single quotation marks when they are being used metaphorically of genes and lower-order organisms, and even when they are used with respect to human behaviour; they will only appear without these marks when they refer specifically to human motivations (see discussion in Section 1.2).

in terms of natural selection. This is evident, for instance, in the writings of Edward O. Wilson who envisages that the discipline will, in time, provide a consilience of knowledge – it will subsume all the "great branches of learning", from science to the creative arts, sociology, ethics and religion, into its single paradigm of selection theory (Wilson 2000: vii, 559-565). The biological explanations of human morality will displace the need for religion (Wilson 1980) and become the starting point of moral philosophy (e.g. Wilson 2000: 562). One recent example of this consilience is *The Literary Animal* (2005), a book with its prologue written by Wilson himself, and in which Sociobiology is postulated as the authoritative framework for interpreting literary works like those of William Shakespeare and Jane Austen (Wilson 2005a: viii; Nordlund 2005: 117-118; Carroll 2005: 95-100). Another key sociobiologist, George Williams[3], suggests that Wilson has not gone far enough and that all ways of human knowing, from reasoning and intuition to the very concept of time, will be shown as explicable in terms of natural selection (Williams 2001: 223-227). Thus, its advocates do not see Sociobiology as simply a single discipline within the biological sciences but as an overarching paradigm, that encompasses all aspects of human nature within its explanatory power.

Another important concept in Sociobiology that has caused controversy is the view that all of life can be described in terms of the single uniting theme of 'selfishness'. In the sociobiological perspective, the outcome of natural selection is that life necessarily consists of 'selfish' entities. Selection results in 'selfish' individuals that 'compete' in order to outreproduce others in their population, and 'selfish' genes that 'vie' to replicate themselves through reproduction, and so displace other genes in the population. This 'selfishness' is further borne out in the sociobiological view that these individual reproductive and gene replicative successes serve the interests of

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[3] In this thesis two authors with the surname Williams are referred to – George Williams, a sociobiologist, and Patricia Williams, a theologian. In Chapters 2-6 all references are to George Williams, except in two footnotes where it is made clear that the reference is to the other author. In Chapters 7-11 the reference is always to Patricia Williams.

only the individuals and the genes (and possibly the group), with no necessary wider benefit to the sustaining of species. As human nature is seen as subject to natural selection, sociobiologists consider that the basic human motivation is that of selfishness where the desire is to promote one's own reproductive and genetic replicative success over that of others. The 'selfish' description, which begins at the metaphorical level with the genes, finally culminates with its literal expression as selfishness in the human motivation (although it should already be noted that selfishness as the pursuit of reproductive-replicative interests is not the common understanding of this term – discussed further in Section 1.2).

It is on these bases, that the forms of 'altruism' in nature and the instances of human benevolence are deemed as fundamentally 'selfish'. They are simply behaviours that fulfil the 'selfish' selective advantage of increased reproductive-replicative success. It is because of such ends, that humans, like all other species, will only aid those who are kin, reciprocal partners and group members. Human nepotism, reciprocity in "I'll scratch your back if you scratch mine" and group aid are the full extent of human benevolence. Indeed, even in these forms of human care, psychological limits are proposed on the grounds of the reproductive-replicative outcome – nepotism is bounded by self-interest, reciprocity necessarily involves cheating, and group allegiance has its counterpart in inter-group rivalry and violence. Thus, human benevolence is seen as 'selfish' at many levels as the descriptor is earned on account of: the 'selfish' outcomes in reproduction and gene replication; the human selfish motivation which directs behaviour to these ends; the resulting human concern only to aid certain individuals; and the constraints on care even within these bounds.

It is this vision of all aspects of life as explicable in terms of natural selection and as fundamentally 'selfish', including human benevolence, which forms the distinguishing features of sociobiological writings. In their texts, natural selection is always paramount and 'selfish' explanations of 'altruism' are endemic. This marks sociobiologists off from others within the biological sciences.[4] Among those who adhere to these sociobiological principles, as has already been indicated above, are E. O. Wilson and George Williams; both of whom have been key contributors to the paradigm. In fact, it was Wilson's book *Sociobiology: The New Synthesis*, first published in 1975, that brought the idea of human benevolence as constrained to biological forms into the wider scientific and popular consciousness. Another important author in developing the human implications of Sociobiology has been Michael Ruse. It is, of course, Richard Dawkins who, in 1976, first described the effect of natural selection and the resulting forms of 'altruism' in terms of 'selfish' genes. William D. Hamilton is noted for his work during the 1960s on kin 'altruism' in which he set out the genetic basis for this 'altruism', as well as the 'self-interest' that limits such care of kin. The writings of Scott Forbes and Douglas Mock are recent examples of texts based especially upon Hamilton's ideas. Robert Trivers and Richard Alexander, during the late 1970s and the 1980s, established the basic principles of reciprocal 'altruism', along with its 'selfish' interpretation and the alleged bias toward 'cheating'. Biologists like David Barash and John Alcock have also written key texts in support of the sociobiological approach to 'altruism'. The idea of group 'altruism', which was originally dismissed from the biological discourse in the late 1960s, has more recently been reintroduced through the work of David Sloan Wilson and Elliott Sober.

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[4] So, for instance, the evolutionary biologists Stephen Jay Gould and Richard Lewontin do not accept the sociobiological assumption of natural selection as the only means of evolution, nor its assigned role as the explanator of all human behaviour (e.g. Gould & Lewontin 1979: 581-598; discussed in Sections 2.2, 3.2 and 3.3). More closely allied to the sociobiological view is that of evolutionary psychologists with whom they share many of the same premises, such as the primacy of natural selection in understanding behaviour, the centrality of the issues of reproductive-replicative fitness and their description in terms of 'selfishness' (e.g. Wright 1995). One key difference is that whereas sociobiologists see present human behaviour as adaptive, evolutionary psychologists tend to see it as mostly maladaptive – the latter consider that human behaviour met the reproductive-replicative requirements in the past Pleistocene era but no longer do so in present society (e.g. Pinker 1997: 42; see also Barkow 1989). Natural selection has not yet effected the changes to human behaviour to make it adaptive to the present, technological clime. Although Evolutionary Psychology is an increasingly popular paradigm, as sociobiologists have set out the key concepts for the explanations of 'altruism' in terms of selection and 'selfishness', the subject of interest in this thesis, it is their writings rather than that of evolutionary psychologists that will be the focus of this research.

The response to Sociobiology has undoubtedly changed since Wilson's publication of *Sociobiology* in 1975. At the time, the work evoked an outcry among academics for its delimitation of human behaviour to matters of selective advantage (see Alcock 2001: 4). The reaction to this book was such that Wilson was doused with ice water as he waited to present a paper on his work at the 1978 annual meeting of the American Association for the Advancement of Science. While the sociobiological view continues to be denounced within biology by those like Richard Lewontin and Lynn Margulis (see Section 2.2), the general attitude has changed. As Wilson himself observes, in the time between the first publication of his work and its republication in 2000, the discipline has become common parlance in biology (Wilson 2000:vi). This ever-broadening application of Sociobiology is evident in any perusal of current biological journals. It is used to describe the 'behaviour' of organisms as diverse as humans and bacteria (e.g. Griffin, West & Buckling 2004: 1024-1027). The idea of 'selfish' genes has become so accepted within science and wider culture that, as Richard Dawkins notes, the Oxford English Dictionary has referred to 'selfish' genes in its definition of selfish since 1989 (Dawkins 1989: 275-276).[5] The sociobiological descriptions of human benevolence have also gained popularity. One example of this is a very recent article in the scientific journal, *New Scientist*, which posed the question of whether religion is not now redundant given that this biological approach can fully describe human morality (Phillips 2007: 32-36).

The sociobiological view evidently presents certain challenges to the Christian worldview. In their depiction of the natural world in terms of 'selfishness', sociobiologists themselves are clear that this repudiates the Christian belief in a Creator who is benevolent – the "God-is-good" idea (Williams 2001: 212-217).[6] Their view also largely dispenses with any

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[5] The continued use of 'selfish' genes in this dictionary can be seen in its on-line, updated version (http://dictionary.oed.com).

[6] Sociobiologists, like George Williams, also consider that the evolutionary paradigm

expectation that humans themselves bear an innate capacity for goodness, for whatever appears as 'altruistic' at one level always has a 'selfish' explanation at another, and often more basic, level.[7] The traditional Christian view is that humans are sinful but that through a relationship with Christ, they can begin to exhibit genuine love for God and human others (e.g. Berkhof 1994: 532f). Human biology does not occlude the possibility of human goodness. In fact, given that the Christian God is both the Creator and the one revealed in Christ, the expectation, as Carolyn King says, is that human biological capacities will facilitate this love in some way (King 2002: 119). Yet, the sociobiological view is not only that human nature is innately bound to selfishness, but that the Christian faith itself does not impel humans beyond this limit. Their view is that Christianity simply supports the biological forms of 'altruism'. More specifically, they consider that the New Testament (NT) teachings on love are just endorsements of the human biological propensities to care for kin, reciprocators and group members (e.g. Ruse 2001). As such 'altruisms' are essentially 'selfish', the inference is that the Scriptures, those who live by its principles and the Deity revealed in its texts, are all encompassed within the sociobiological 'selfish' motif. It is the aim of this thesis to consider critically the various attributions of 'selfishness' in Sociobiology, from its description of the natural world to that of NT love. There is a need for such writings because, as the discussion will now show, the discourse between Sociobiology and Christianity is far from complete.

Christian writers have been in dialogue with Sociobiology since Wilson's book was first published (Cavanaugh 2000). The response has rightly not been entirely negative, and there has been an acknowledgement of

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provides a non-teleological explanation of nature – one in which the necessity for divine action is completely redundant (Williams 2001: 211-212; Mayr 1991: 93; 2002: 4). Implicit in their view is the idea that for proof of divine action, there must be gaps in the evolutionary process that need to be traversed by divine miraculous intervention. This is, of course, to misunderstand the Christian view of creation which is not just of miraculous events but of natural processes upheld and sustained by God (see Heb. 1: 3, Col. 1: 17; McGrath 2005: 60; Jeeves & Berry 1998: 131).

[7] Even those such as Richard Dawkins who consider that humans can express genuine goodness, do so on the basis that humans act in opposition to their inherited 'selfish' natures. Any genuine human beneficence requires that humans bypass their biological natures; Dawkins' view is discussed in Section 3.3.

sociobiological insights into human nature. Much of this dialogue has been taken up with the issue of the relation of genetic inheritance (and thereby, natural selection) to particular behaviours, with debates about the propensities for developing mental illness, matters of gender biased behaviour and homosexuality (e.g. Nessan 1998; Drew 1997). These are important issues in their own rights but also impinge upon the matter of human 'altruism'. The very idea that sociobiologists can define human benevolence depends upon their view that all of human behaviour is subject to the selection process. This issue is an important one, although the implications for human 'altruism' are not always pursued in theological writings.[8]

The critique of the concept of a pervasive 'selfishness' in nature has been especially rare among Christian thinkers, and perhaps the only writer to deal with this issue in any depth is Holmes Rolston III (Rolston 1999).[9] This is a remiss not only because the science presents a clear challenge to the idea of divine providence in creation but because of its implications for matters of 'altruism'. The sociobiological 'selfish' understanding of human 'altruism', as indicated above, is built upon its 'selfish' description of the basic processes in nature. The two are interwoven and any comprehensive critique of human 'altruism' in Sociobiology must consider its attribution of 'selfishness' at these lower levels. Thus, this thesis begins with a critical analysis of these formative concepts in Sociobiology, its 'selfish' descriptions of nature (Chapter 2), and its attempts at a comprehensive explanation of human behaviour in terms of natural selection (Chapter 3). Only then does it turn to addressing the alleged 'selfishness' in the biological forms of 'altruism' in

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[8] The issue of human 'altruism' has sometimes been approached from the perspective of whether Sociobiology presents a form of the naturalistic fallacy – the apparent derivation of ethical prescriptives from biological data with the unwarranted move from the *is* of biology to the *ought* of ethics (e.g. Ayala 1995: 118). The view of those like Michael Ruse, however, is not that their paradigm can prescribe moral norms but that it is authoritative because its descriptions are comprehensive (Ruse 2002: 163). The question is, therefore, whether Sociobiology provides a full explanation of human behaviour and culture as its advocates like Ruse envisage.

[9] Alister McGrath has also given some critique, specifically of Dawkins' 'selfish' gene theory, and this is noted in Section 2.3.2.

nature and their relevance to human society (Chapter 4-6). These chapters present a distinctive contribution to the discourse with Sociobiology as they begin at a foundational level but also extend analysis to an in-depth assessment of biological 'altruism' in nature and human nature. Whilst most theologians accept the sociobiological theories of kin, reciprocal and group 'altruism', this thesis quizzes these theories in significant detail with the result that important and novel insights emerge.[10]

The Christian response to the sociobiological interpretation of the human benevolence indicated in the NT texts on love has also been less common in the discourse with the science. Among those who have engaged with this issue are the theologians Stephen Pope and Patricia Williams, both of whom have considered the matter at some depth.[11] Both Pope and Williams see Sociobiology as largely defining human nature and relate the sociobiological descriptions of human 'altruism' to the prescriptives on love given in the NT.[12] While their approaches are very similar, the conclusions that they come to are markedly different. Pope views Sociobiology as being instructive in defining the nature of NT love – he sees the innate propensity to care for some more than others (namely, self, kin, reciprocators and group affiliates) as priorities that are reflected, to a large extent, in the NT prescriptives of care. In contrast, Williams sees the science as defining the evil and sinfulness that is innate within human nature, the original sin that biases

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[10] So, for example, that kin selection can account for only some aspects of human relationships with genetic relatives, that reciprocity (as sociobiologically defined) is largely used as the standard only for human relations in economic contexts, and that human group selection theory is unsound.

[11] Other contributions include the collection of essays in *Altruism & Altruistic Love* (2002) and in *Evolution and Ethics* (2004), Philip Hefner's *The Human Factor* (1993) and especially Holmes Rolston's book *Genes, Genesis and God* (1999). Yet, although these works engage with sociobiologists, they tend to have the rather broader interest in religion generally rather than specifically in the NT texts. *The Altruistic Species: Scientific, Philosophical, and Religious Perspectives of Human Benevolence* (2007) by Andrew Flescher and Daniel Worthen, was published just as this thesis was being submitted, and may have pertinent contributions to make to the issues covered in this thesis. The relevance of the work of Colin Grant's book *Altruism and Christian Ethics* (2001) is discussed later in this section.

[12] The NT texts on love used in their analyses are taken from both the gospels and the epistles.

expressions of care for 'selfish' reproductive-replicative ends.[13] In her view, these biological propensities, rather than being supported by the NT texts, are in opposition to its teachings on love, which require the forgoing of the care of self, kin, reciprocators and group members in the love of those who lie outside these bounds. It is clear, from the very different conclusions arrived at by Pope and Williams, that much remains to be explored on this subject. There is a paucity in the discourse that shows that a more thorough analysis of the NT texts in the light of Sociobiology still needs to be addressed.[14]

Yet, Pope and Williams (and sociobiologists themselves) have surely set out an appropriate methodology for engaging Sociobiology and Christianity on the matter of 'altruism'. There are, of course, many NT texts that are concerned with injunctions for love, as well as prescribing those to whom such love is to be shown. Further, the teachings in the texts are often given as reflections upon that distinctive element in the faith, the person of Christ. So, if one is interested in what the Christian religion contributes to matters of human benevolence then these texts present an important source. Indeed, having outlined and critiqued the discourse as given by Pope and Williams (Chapter 7), this approach will be taken up and developed in the subsequent chapters of this thesis (Chapters 8-10). Yet, these chapters will consider the NT texts in much more depth than these prior works, and will employ biblical scholarship to this end[15]. So, just as this research is distinctive in its intensive

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[13] This idea of human biological nature as original sin is particularly characteristic of Patricia Williams' early works, and has recently been taken up in the writings of Lluís Oviedo (2005: 107-120), and Daryl Domning and Monika Hellwig (2006). Nonetheless, Williams has engaged with Sociobiology at a depth and over a period of time which makes her work the most instructive for this approach

[14] In addition to both the challenge to the texts that has been laid down by sociobiologists and the fact that this issue evidently requires further Christian response, the matter is of particular interest to the writer of this thesis who is *evangelishe* (e.g. Bockmuehl 2007: 172) – belongs to an evangelical tradition where biblical texts are important.

[15] Exegetical works are relevant because they disclose something of a text's original setting and meaning, and communicate this to a modern audience. Where Scripture is seen as sacred in some way, this discernment of meaning is an important element in the moral development of individuals and communities (discussed further immediately below). This is not to negate, however, the insights of postmodernism which has recognised the role of the individual, whether exegete or lay believer, in contributing to the meaning assigned to texts (e.g. Adam 2006). Nonetheless, this need not lead to a

scrutiny of the sociobiological depiction of nature, human nature and 'altruism' (Chapters 2-6), it is also exceptional in its thorough and rigorous consideration of the NT teachings (Chapters 8-10). Nonetheless, the aim is to attend to the meaning of the biblical texts specifically for the NT conception of love, and this in the context of its relation to Sociobiology.[16] As such, some of the nuances and questions that the biblical texts raise for other areas of knowledge will be set aside – this includes the very lengthy debates upon matters such as authorship and some of the higher critical issues that surround texts.[17] Only by so doing, can the focus in these chapters remain acutely upon holding the texts and sociobiological issues in conversation with one another. Indeed, as this thesis will show, remarkable and highly relevant insights emerge from this approach which indicate a much more complex rendering of NT love and its relationship to sociobiological concepts than is seen in any previous works, including the writings of Pope and Williams.

The assumption in this approach is, of course, that the ancient NT teachings on love have present meaning for matters of Christian benevolence. It presumes that the NT continues to influence the behaviours and attitudes of modern day Christian believers and, consequently, that the texts can be seen as in some way representative. Yet, this is by no means straightforward as Christian behaviour and motivation is influenced by many cultural sources,

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deconstructionism where the original writer's own intended meaning is seen as inaccessible (discussed by Cahill 2002: 13ff; also Osborne 2006: 490-498; Carson 1995: 41).

[16] The hermeneutic employed is one that draws both upon elements from the synchronic approach to texts which considers meaning in the light of a contemporary context (here, that of the modern evolutionary theory of Sociobiology), but also incorporates some aspects of the diachronic historical-critical approach (see Barton 2001: 67-68). Another possible method of interpretation could have been that of reception history – looking at the way in which texts have been understood by individuals and communities over time (Burrows & Rorem 1991: xii). In this case, looking at the dynamic process of individual and community responsiveness to, and reflection upon, particular NT texts on love throughout history.

[17] This includes the forms of criticism from feminist and Afro-Caribbean readings of the texts. This is a notable restriction when one considers that such issues as servanthood and slavery are raised by the texts in this thesis. Nevertheless, rather than seeing this simply as a necessary limitation, it may be that the approach of these chapters can be seen more positively as the contribution of another form of criticism, with its interest not in a feminist or Afro-Caribbean view of a text but in a NT reading in the light of sociobiological motifs.

quite apart from biblical texts. In fact, every individual will differ in the intermix of biblical and other influences that are brought into their conception of human relationships (Cahill 2002: 13ff).[18] In addition, there are the personal experiences that each individual brings to the interpretative process through which they attempt to apprehend and apply any formative writings on love. Nevertheless, even given these provisos, wherever the texts are considered in some way as sacred, they will, undoubtedly, function within both individual and community consciousness in orientating and directing the nature of relationships. The NT teachings are ideals that will only be reflected to some extent in the moral nature of believers but they will, nonetheless, have some influence. So, L. Gregory Jones rightly refers to Scripture as guiding and transforming the moral life of believers (Jones 2002: 22f). David Fergusson also recognises the role of biblical texts, especially key passages such as the Lord's Prayer, upon character formation (Fergusson 2004: 104-107).[19]

The premise that particular Christian teachings on love in the NT contribute to developing the moral nature of believers has been disputed by Colin Grant in his well-known work *Altruism and Christian Ethics* (2001). Grant argues that while the Christian faith encourages a deeper form of human benevolence than Sociobiology can accommodate, it does not, and indeed cannot, do this through specific directives about loving others (Grant 2001: 234f). He contends that any such forms of deliberate benevolence, with their studied focus on the benefiting of others and attaining particular goals, will be ineluctably self-defeating as it enhances, rather than alleviates, a preoccupation with the self (e.g. Grant 2001: 240-241, 84-86). It is, instead, only by the absorption of the self with the transcendent vision of the Deity

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[18] This is true of biblical exegetes as well as lay believers, and even the NT writers themselves will have drawn upon the cultural ideas prevalent in their society. Nonetheless, a primary influence in the NT writings is the person of Christ and, of course, the relation of Christ to the Old Testament Scriptures.

[19] In the recent work *Christian Wisdom,* David Ford makes this point when he speaks of the formative role of the Bible in Christian identity (past, present and future) and subsequently, in the expression of love (e.g. Ford 2007: 2, 178-179). The relationship between the Bible and moral behaviour has been explored by many, for example, Gareth Jones reflects upon the way in which communities integrate texts within their moral life (Jones 2001: 23f; see also Colwell 2001: 86f), and those such as Brian Brock attend to the important role of biblical exegesis in this process (Brock 2007: 257ff).

and the Divine's love that genuine altruism can be formed in the believer (Grant 2001: 237, 241, 249). Whilst not denying this element in Christian love (and, indeed, it will be referred to later in this thesis – Section 8.2), surely the human mind can self-consciously adopt a goal, such as the NT injunction not to be concerned with reciprocated returns (e.g. Luke 14: 12; Section 10.2), and for this then to become so internalised that such returns are simply not considered or looked for. What begins in self-aware deliberation may lead to an other-centred concern that no longer carries a focus upon the self or even the rule of behaviour.[20] Indeed, it is by directly encouraging a genuine and radical love for all others in specific and well-defined mandates that the NT sets out to transform human individuals and cultures toward expressing such a love (Chapters 8-10).

Nonetheless, the approach of Pope and Williams, and this thesis, is not the only means of engagement with Sociobiology on matters of Christianity and human benevolence. Another possible approach is that of virtue ethics which considers the role of attributes like prudence and wisdom in human relationships, and the way in which such patterns of life can contribute to universal goods – both of which can give an alternative perspective to Sociobiology (Deane-Drummond 2004: 168-175).[21] Others may be framed from the deontological[22] or consequentialist[23] ethic. Yet, while these

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[20] This initial self-conscious deliberation is surely essential as it allows humans to orientate their lives according to their ideological commitments – it enables values and goals to be identified, sorted and prioritised. Even when these are internalised and become implicit through habit, the deliberation process must reoccur from time to time if the individual is not to lose the ability to assess the motivation within her/himself and the possibility for further change. Self-awareness and deliberation are essential elements of human benevolence.

[21] In fact, as this thesis is concerned with the character of believers, it shares some aspects in common with the virtue approach. The difference is, of course, that the ideals of virtue explored here stem specifically from biblical texts.

[22] One example of this is the moral obligations derived from the theological ideal of agape love – such an approach is seen in Eva Grantén's work on Sociobiology where she integrates its insights with reflections upon Christian agape (Grantén 2003: 107ff). Although agape is derived from the NT ideal of love of neighbour, the interaction with actual texts in this work is minimal.

[23] This ethical perspective may be taken from the point of view of human flourishing, for example, drawing upon natural law theory in order to relate the issues to human individual well-being and species thriving – such an approach is indicated in Larry Arnhart's work (Arnhart 2004: 204-209).

approaches may helpfully explore the human potential for loving actions beyond the sociobiological circumference, they do not directly address the particular challenge that sociobiologists have made with regard to the NT teachings on love. Moreover, the interpretation of these NT texts has bearing upon these ethical approaches where they draw upon shared biblical elements.[24] Hence, an assessment of the NT teachings on love has contributions to make, beyond its own dialogue with Sociobiology, to the biblical strands within theological approaches. Thus, without a robust textual analysis, the Christian discourse with Sociobiology would be much impoverished.

Another possible approach is the evidential method that considers the actual praxis of Christian believers through sociological studies like surveys. There are an increasing number of such studies that have considered the correlation of faith with phenomena like volunteering in charitable activities (see Ward 2006: 159-165). They present an informative approach although they have their limits. Such studies cannot easily reveal what aspects of the worldview of Christians are being brought to bear on their responses toward others. They can identify general features of Christian behaviour but not the specific content, the Christian tenets that have affected this influence. So, while a consideration of NT texts reveals the Christian beliefs that can contribute to human benevolence but may or may not be involved in the actual practice of particular believers, sociological approaches suffer from the reverse problem of identifying features of praxis but not necessarily of content. All of these approaches present important ways in which the discourse with Sociobiology must proceed. Indeed, given the present ascendancy of Sociobiology in science and wider culture, it is imperative that such works continue to engage with the paradigm, presenting ever deeper and fuller analyses of its theories. It is within this context that this thesis has

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[24] This includes, for instance, the love of the enemy in the agape deontological approach (e.g. Grantén 2003: 127) and Deane-Drummond's virtue ethic where divine wisdom in considered in the light of the cross of Christ (e.g. Deane-Drummond 2004: 218) – aspects of NT love which are dealt with in Sections 10.3 and 8.4 respectively.

been written and it is hoped that it will contribute to this very important dialogue.

1.2 Defining the Terms used in the Sociobiology and Christian Discourse

It is, no doubt, already evident that the term 'selfishness' is used in various senses in sociobiological writings. It is used metaphorically for the genes and for the behaviours of lower-order organisms (phenotypes), and literally for the human psychological motivations. There is often a movement between these meanings in the sociobiological literature that is not clarified and can only be understood by the context. In order to aid comprehension, this thesis will try to specify the particular form that is being referred to, the definitions of which are given in the table below. The terms will appear in single quotes where a genetic or phenotypic sense is meant, and will only be used without quotes when it refers specifically to its psychological meaning.[25] The same style will be used to distinguish the various meanings of 'altruism'.[26]

The matter of definitions is further complicated because psychological selfishness in Sociobiology refers to the disposition to maximise one's reproductive-replicative success. As was mentioned in Section 1.1, this is not the popular conception of selfishness, which is usually in terms that are not related to reproduction and genes but to matters such as the pursuit of pleasure, greed and so on. In order to provide a means by which human motivations can be differentiated, this research will follow the sociobiological meaning of selfishness. This will be differentiated from the other possible forms of human motivation which are discussed in this thesis, that of egoism (the desire to maximise the self's own pleasurable state and minimise any pain[27]) and that of genuine altruism (where the well-being of another

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[25] Other terms will appear in single quotes where they are meant metaphorically, such as the use of expressions like 'competing' and 'cheating' for genes and lower-order organisms.

[26] It should be noted that the term genetic 'altruism' never appears in sociobiological works because it is not deemed possible in a world entirely characterised by 'selfish' genes.

[27] Although sociobiologists formerly recognise the centrality of reproduction-replication in

individual is of ultimate concern) – see Table 1. The innate drives of hedonism and empathy that contribute to these human motivations are also described in this table. Another potential issue in the matter of definitions is that the term altruism is often used synonymously with the love (*"agape"*)[28] of the NT, although the former nowhere appears in these ancient texts. Nonetheless, given that this term implies a selflessness where the concern for others is paramount (see the definitions of altruism and psychological altruism in the table), this certainly fits with the biblical conception of love which carries the notion of the sacrificial concern for others (described in Chapter 8).[29]

Table 1 The definition of the terms used in the discourse.

Entity/Trait	Description
Gene	commonly the stretch of DNA (deoxyribonucleic acid) that produces a protein, although it may refer to any sequence of DNA that is stable over several generations and which makes a difference, even if only subtle, to the individual organism's phenotype
Phenotype	the physical traits, including social behaviours, of an organism that are generated by the genes
Chromosome	"a discrete unit of the genome carrying many genes" (Lewin 2004: 984)
Genome	the total set of genes in an individual organism
Gene pool	the total set of genes in the local population of a species
Selfish	"deficient in consideration for others, thinking chiefly of one's own personal profit or pleasure"[30]

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their understanding of psychological selfishness (e.g. Trivers 1985: 586), they often move between their notion of selfishness and that of self-centred egoism as if the two were equivalents. As sections like 4.5 will show this is not appropriate as egoism can contravene reproductive-replicative success, and reproduction, quite unlike egoism, is demanding, costly and even painful with respect to the individual.

[28] The NT term for love is often *"agape"* which carries the sense of love and genuine concern, although *"phileos"* is also used (e.g. Jn. 3: 35; Carson 2000: 31f).

[29] In fact, although altruism was only coined as a term by Auguste Comte in the 19th century, scholars like Colin Grant and Charles Taylor have argued that the concept behind this term was derived from the NT ideal of love (Grant 2001:xiii, 54, 167; Taylor cited in Post 2002: 55-56).

Entity/Trait	Description
Altruism	"regard for others as a principle of action"[31]
'Selfish' gene	a stretch of DNA that due to natural selection effects its own successful replication (and consequent increased representation in the gene pool) usually by contributing to the reproductive success of individual organisms
Genetic 'selfishness'	the behaviour of an individual that is generated by its constituent genes, and which leads to the replication of these selfsame genes or the replication of shared gene copies in other individuals
Genetic 'altruism'	the behaviour by an individual which leads to the replication of other genes, ones not shared in common with the individual
Phenotypic 'selfishness'	a behaviour in which an individual benefits its own survival over that of others
Phenotypic 'altruism'	a behaviour in which an individual benefits another's survival at phenotypic cost to itself
Phenotypic cost or 'work'	a behaviour in which an individual exerts itself at energetic loss to itself
Phenotypic gain or benefit	a behaviour in which an individual accrues energetic input or other necessary resources
Psychological selfishness	the human psychological motivation of promoting one's own reproductive-replicative interests over that of others
Psychological egoism	the motivational state in which one's own pleasure and avoidance of pain is of ultimate concern, and is pursued often at cost to others
Psychological altruism	the motivational state in which the well-being of others is of ultimate concern, and which may lead to acts which benefit these others at cost to the self
Hedonism	the biological drive to perpetuate pleasurable experiences and avoid painful or unpleasant ones
Empathy	the innate capacity to attend "to the feelings and the situation of the other person" (Katz 1963: 8) and which is a key aspect of psychological altruism (Batson 1991)

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[30] Taken from the *The Concise Oxford Dictionary* (1982: 955)

[31] *The Concise Oxford Dictionary* (1982: 26)

1.3 The Aim and Outline of the Thesis

The intention of this thesis is to engage with and proffer a critical appraisal of Sociobiology's use of the 'selfish' terminology at many levels, from its vision of nature to its 'selfish' interpretation of NT love. Chapter 2 begins by assessing the sociobiological interpretation of nature as constituted by 'selfish' individual organisms that outreproduce others, and 'selfish' genes that outreplicate other genes (primarily through the reproductive process). This chapter shows that these ascriptions are misleading and draws particular attention to the elements of 'sacrifice', with regard to both individuals and genes, in sexual reproduction. Moreover, it is argued that, in contrast to the sociobiological view of this process as only serving the interests of individuals and genes (and at most, the group), reproduction naturally facilitates the wider good of species survival. Thus, it is suggested that the metaphor of 'sacrifice' or 'other-directedness' is as appropriate, if not more so, to the sociobiological 'selfish' description of nature. The insights brought to the fore in this chapter are drawn upon in the critique of the sociobiological depiction of 'altruism' in terms of 'selfish' genes and individuals in Chapters 4-6.

Chapter 3 critically evaluates the sociobiological view that human behaviour and culture are determined by natural selection. The chapter considers both the sociobiologists who argue for this on the basis of a tight linkage between the genes and human nature, the so-called 'strong' co-evolutionary theory, and those who contend for it on the grounds of memetic theory. The latter is the idea that the mental constructions and concepts that constitute culture are propagated by passing from mind to mind through a process which is analogous to gene-based natural selection. It will be argued that memetic theory is unconvincing, and that only a 'weak' version of the co-evolutionary approach is appropriate. Natural selection can only explain some aspects of human behaviour and culture for humans can, and regularly do, transcend their genetic propensities. Already the expectation stemming from this chapter is that humans will exhibit the selected forms of 'altruism' seen in wider nature, but that they will not be bound entirely to these forms.

Chapters 4, 5 and 6 critically examine the forms of 'altruism' posited by sociobiologists, that of kin, reciprocal and group 'altruism' respectively. The chapters assess whether there is warranted scientific support for these proposed 'altruisms'. More particularly, they offer critical analyses of both the 'selfish' explanations attributed to these 'altruisms' and the implications for human benevolence given by sociobiologists. Chapters 4 and 5 show that there is theoretical and empirical support for the selected forms of kin and reciprocal 'altruism' in the natural world. This is not so for group 'altruism' as the strict and complex criteria required for its evolution mean that its actual occurrence in nature is much less feasible (Chapter 6). The 'selfish' descriptions ascribed to kin and reciprocal 'altruism' at the genetic and phenotypic levels by sociobiologists are shown as inappropriate as they neglect the many 'altruistic' aspects that also occur at these levels. Moreover, both kinship bonds and reciprocity make important contributions to the sustaining of species.

These chapters also demonstrate the way in which the biological categories of 'altruism' do not describe the full extent of human benevolence. The idea that human nature is characterised by a pervasive nepotism is countered in Chapter 4 which argues that while there is a genetic basis to the human care of offspring and perhaps to sibling relationships, any preferences for wider kin are only weakly, if at all, supported by the genes. In Chapter 5, the sociobiological view that humans are bound to insist on reciprocal returns in their relationships with non-relatives, and will cheat in order to maximise such returns, is also challenged. This chapter contends that humans naturally expect returns in the exchanges of goods, such as in economic trade, but do not necessarily use this standard in personal relationships. In Chapter 6, the arguments for group selected forms of 'altruism' in human society are shown as unsupportable, not least because they are based upon memetic theory.

This is not to say that humans do not form groups but that this phenomenon cannot be explained by natural selection. Thus, the sociobiological categories of kin and reciprocal 'altruism' are of limited relevance, and that of the group is inapplicable. Further, instances are given in these chapters where humans evidently care for others beyond the kin, reciprocal and group boundaries.

Moreover, the sociobiological view of the human psyche as an innate favouring of some individuals which is selfishly motivated by the individual's own reproductive-replicative interests is critiqued. In contrast to this perspective, the idea developed throughout these chapters is that humans have an inherent capacity for empathy which enables them to express genuine psychological altruism. Humans have also inherited hedonistic drives that are critical for survival but which can become an end in themselves in egoism. Human nature is not characterised by selfishness alone (the reproductive-replicative drive) but transcends these in the ability for both genuine altruism and egoism. As these chapters will indicate, human cultural values have a role in determining which of these motivations predominate in an individual's response to others. (It should be noted that Chapters 4-6 do not seek to set out a full description of the human psyche but only at sufficient depth to engage with its sociobiological depiction as selfish.)

In Chapter 7, the sociobiological appraisal of Christian care in the NT is presented, along with the responses to the paradigm from Stephen Pope and Patricia Williams. All of these views are critiqued in the light of the insights into human nature and benevolence developed in Chapters 4-6, with some anticipatory comments being made from the discussions in Chapters 8-10. In contrast to the sociobiological attempts to explain the NT injunctions on love in terms of the biological forms of 'altruism', it already becomes evident in this chapter that the texts call for a genuine psychological altruism that is extended beyond the categories of kin, reciprocal partners and group members. While both Pope and Williams make important contributions to the discourse, their analyses fall down both because they assume that Sociobiology is largely right in its description of human nature, and because they tend to take rather one-dimensional approaches to the relation between the biological forms of 'altruism' and the NT teachings. Whilst Pope sees these forms as largely warranted by the NT texts, Williams considers that they are in direct opposition to its teachings.

In Chapters 8-10, there is an in-depth analysis of the NT teachings on love, especially as they relate to sociobiological concepts. Chapter 8 examines the nature of NT love as described in a passage from St. Paul's letter to the Philippians (Phil. 2: 3-8). In keeping with other NT texts, it is argued that this passage shows that believers are to express a radical, psychological altruism which places the welfare of others before one's own. This altruism is mediated by humility, a self-abnegation in which any absorption with the self is set aside, and an empathetic attentiveness to the needs and well-being of others. The Philippian passage demonstrates that this love finds its exemplar in the Christ whose self-giving service to others extended to the utmost – the sacrificial work of the cross. This is a profound altruism that evidently transcends the sociobiological selfish motivation, and is overtly described in the text in opposition to self-centred egoism.

Chapters 9-10 investigate the relation of this love in the NT to the sociobiological categories of kin, group members and reciprocal partners. Chapter 9 contends that the NT texts require that believers care for their natural family, but that this commitment of love is extended outwards to include the new family of the church. The language of the family is used to bond together a community of sisters and brothers who bear no necessary genetic relatedness to one another. The sociobiological view that this church community is an example of group 'altruism', as it is characterised by a love only for those within the group's bounds, is also challenged. This research contends that the NT teachings require that believers express a love for those outside their church community – the calling is that of a universal love for all others. This goes beyond Sociobiology both in that the love for others inheres a psychological altruism (Chapter 8), and that the care of kin is expanded out toward the church family and to *all* (Chapter 9).

In Chapter 10, the relation of NT love to reciprocal interests is considered. While there are no NT texts that undermine reciprocity in economic trade, it is argued that an examination of the NT demonstrates that the love for others is not based on the reciprocal condition of returned benefits. This is evident from the requirement that believers show a special concern for the weak, those who cannot return any favours, and for the enemy, who has no desire to reciprocate. Moreover, while the NT promises rewards to believers who exhibit such a love, this does not undermine the non-reciprocal character of love. This is because the reward is not a pampered self-indulgence but the perfecting of the believer's capacity to love. The reward of self-giving love is the consummation of this love in the lives of believers.

Thus, this thesis challenges the sociobiological construal of nature in terms of 'selfish' genes and 'selfish' individuals (Chapter 2), and its assumed hegemony in the explanations of human nature (Chapter 3). It argues that the sociobiological descriptions of 'altruism' in nature as essentially 'selfish' are unwarranted, and that its explanations of human care have limited applicability (Chapters 4-6). The interpretations of NT love by sociobiologists and the theologians, Pope and Williams, are critiqued and demonstrated to be inadequate (Chapter 7). In the final chapters, the character of NT love, instead of conforming to sociobiological descriptions, is shown to transcend them in a sacrificial, radical love which is extended to all and is not bound by reciprocity (Chapters 8-10).

Chapter 2: Sociobiology and its 'Selfish' Interpretation of Nature

2.1 Introduction

In this chapter, the biological processes and perspectives that are inhered in the sociobiological vision of evolution will be outlined and critiqued. Section 2.2 presents the sociobiological depiction of evolution as the reproductive success of some individual organisms over others, and the relative replicative success of some genes over other genes. It is this that forms the framework for its 'selfish' depiction of nature. In the sociobiological view, evolution is effected by 'selfish' individuals that 'compete' in order to outreproduce others in their population, and 'selfish' genes that replicate and displace others in the gene pool. Sociobiologists allege that these processes are of advantage to the successful genes and to individual reproduction but only incidentally, if at all, have any wider benefits to the species. It is a picture of nature as constituted by 'competing', 'selfish' entities. The 'selfish' interpretation attributed at these lower levels is, as was mentioned in Section 1.1, the premise for the 'selfish' renderings of the observed 'altruism' in nature and of human benevolence. As the aim of Section 2.2 is primarily to introduce the reader to the evolutionary process and its conceptual rendering by sociobiologists, comment will be withheld until the later sections that follow.

It is in Section 2.3 that, drawing especially on the writings of Holmes Rolston III and Evelyn Fox Keller, this sociobiological vision of nature is critically assessed. In Section 2.3.1, the idea of individual 'selfishness' is examined and it is argued that this metaphor is misleading especially when one considers the nature of reproductive activity, that key element in the sociobiological paradigm, and the high demands that it places on the individual. Reproduction, far from being 'selfish', is intrinsically costly and 'sacrificial' with respect to the parent. Moreover, in contrast to the sociobiological view that reproductively successful individuals only incidentally garner benefits to populations and species, this section argues that reproductive success naturally effects the sustaining of species. In Section 2.3.2, the concept of 'selfish' genes is discussed and it is shown that the genes that are established in gene pools, so-called 'selfish' genes, are the ones that 'cooperate' to sustain individual and species survival – attributes that, once more, call into question the appropriateness of the selfish metaphor. Indeed, the reason for this gene 'cooperation', and its wider benefits to individuals and species, lies again in reproduction, the process through which by far the majority of genes are replicated and passed to the next generation. As Section 2.3.3 contends, sexual reproduction is remarkably 'unselfish' and 'sacrificial' with respect to the genes themselves. In fact, recent revisions of the 'selfish' gene theory delimit the 'selfish' ascription and attribute it not to all genes but only to a particular class of genetic elements – the most common of which are transposons. In Section 2.3.4, the nature of transposons will be described and it will be demonstrated that even the 'selfish' description of transposons is, by no means, straightforward for these elements have made substantial contributions to the species in which they are found and to the evolution of biodiversity and complexity. Thus, as Section 2.4 concludes, the sociobiological description of the evolutionary process and consequently nature, in terms of the selfish metaphor, is inadequate in the light of the elements of 'sacrifice' that are involved, and the contributions that result in wider benefits such as those to the species.

2.2 The Sociobiological Perspective on Evolution: Nature as 'Selfish' Genes and 'Selfish' Individuals

Evolution involves the dynamic process of genetic mutation and natural selection – an interplay between the generation of natural genetic variability in individual organisms and the preferential selection of some individual variants over others in accord with prevailing ecological constraints. The fundamental source of the genetic variations between individuals is spontaneous mutations – changes in the DNA sequence of individual genomes that may be environmentally induced[32] or due to 'mistakes' being made in DNA replication[33]. If these genetic mutations occur in either the gene regulatory sections or protein encoding regions of the DNA, the result may be altered protein levels or the production of aberrant proteins respectively. When these changes occur in the germ line (pre-embryo, gamete stage) or early embryo stage, they will become characteristic of the subsequently derived organism and the result will be the altered phenotype, physical or behavioural traits, of this individual. Mutations may cause observable physical differences or non-obvious ones such as subtle variations in digestive metabolism. They may alter behaviours such as the mutations that affect the bonding between mothers and their young (Beckman 2004: 1888-1889). Sociobiologists are particularly interested in the latter type of traits – those implicated in social behaviour.

The individual variability generated by mutations is then subject to natural selection with the consequent preferential survival of successful types – a process referred to by Charles Darwin as the "survival of the fittest". According to Darwin, as every population once established will tend to generate more offspring than can be accommodated by the environmental niche occupied, there will be a differential survival in which those better adapted to the environment are statistically more likely to survive over those less well suited (Darwin 1988 [1859]: 46-48).[34] As these more adapted individuals survive over others, it is their adaptive traits that are passed onto the next generation through reproduction. Sociobiologists adopt this darwinian paradigm but with the following modification – that natural selection is not on the basis of the individual's general ability to survive but on its

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[32] Causations include exposure to radiation, certain mutagenic chemicals and viral infection.

[33] Replication involves the synthesis of copies of a DNA duplex using an original parent DNA strand as the template – a process which may result in errors being made in the DNA sequence of the generated strands. The cells, however, do have 'proof-reading' mechanisms that usually keep this to a minimum (see Lewin 2004: 387ff).

[34] The process of selection is a statistical phenomenon and is not prescriptive in every case, for although adaptive phenotypes will, in general, show increased survival, there will be situations where the adaptive individual will lose out due to the chanciness of life.

reproductive success. The issue is not the individual's survival, measured by its longevity or even its health and well-being, but rather its ability to produce more offspring relative to its contemporaries (Alcock 2001: 24; Williams 1974: 26). So, for instance, an individual with a short life span may produce more progeny than that of a longer surviving contemporary and, as such, it will be the former's traits, including that for a shorter life, which will be passed on. In the selection process, the successful variants are simply the individuals that have more offspring than other, reproductively less successful types – an effect which is described as the individual's relative *reproductive fitness.* This means, of course, that every phenotypic trait in an individual, whether digestion or maternal bonding, and the genes that facilitate such traits, are selected on the basis of the contribution they make to the individual's reproduction (Barash 1982: 18). The centrality of reproduction in the selection process is crucial for understanding sociobiological writings, and indeed it is an important insight into evolution.

At the level of the genes, selection means that the genes that enhance individual reproductive fitness more than other genes, will be the ones that will increase in frequency in the gene pool, while the genes which are less advantageous or have a deleterious effect on reproduction will tend to decline and may go extinct. As E. O. Wilson describes the process: "Natural selection can be viewed simply as the differential increase of alleles [gene variants] within a population" (Wilson 2000: 80). Thus, as selection is for individuals that have a greater reproductive fitness, it is, more fundamentally, for genes that have a greater *replicative fitness*[35] – genes that by virtue of their contribution to reproduction are able to generate more copies of themselves in the gene pool (albeit with some exceptions)[36]. As was noted above, this does not mean that the selected genes need be directly involved in reproduction, as they may encode any characteristic, but that they are

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[35] Replicative and reproductive fitness are sometimes subsumed under the single term of *inclusive fitness.*

[36] One such exception is transposon DNA (discussed in Section 2.3.4), another is the genes for kin 'altruism' (discussed in Chapter 4) – in both cases, the genes achieve replicative success by means other than through the individual's reproductive success.

selected on the basis of how such traits contribute to reproduction. The selected gene must "augment phenotypic reproductive success as the arithmetic mean effect of its activity in the population in which it is selected" (Williams 1974: 25). Indeed, it is because genes are selected on the basis of how they enhance reproduction, and because reproduction is itself the means of the gene's own propagation (as they are passed on to progeny) that they were famously characterised by Richard Dawkins as 'selfish'. Dawkins considered that as the gene confers selective advantages to a process, individual reproduction, that ensures the gene's own survival in the next generation, the gene is effecting its own continuance, and consequently is most aptly described as acting 'selfishly' (Dawkins 1989: 19ff). In fact, Dawkins famously described the individual organism as simply a "survival machine" or "lumbering gigantic robot" built by the genes to serve as the vehicle for the genes' own continuance (Dawkins 1989: 19).

Although Dawkins himself frequently stresses that the term 'selfish' refers to the action of genes and not necessarily to individual organisms (e.g. Dawkins 1998: 210-212), in fact, it is not possible to talk about 'selfish' genes without there being implications for the nature of the whole organism. This is necessarily so as 'selfish' genes, the ones that are propagated by natural selection, achieve replicative success by, for the most part, promoting the reproductive success of the individual; that is, the outcome for the genes and for the individual are nearly always inextricably linked. In fact, sociobiologists argue that 'selfish' genes most often effect their replication by generating 'selfish' behaviours in the organism. It is in the direct 'conflict' and 'competition' with contemporaries that essential and limiting resources like food and mates are sequestered by the individual – behaviours that are, of course, necessary and important components in the reproductive success of the organism and consequently the replication of its genes. So, sociobiologists do not speak only of genes as 'selfish' but use the metaphor to refer to individual organisms also.[37] The individual organisms are acting

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[37] See, for example, Wilson (2000: 117), Dawkins (1982: 55-57) and Trivers (1985: 586). Darwin himself, of course, saw natural selection as leading to a 'competitiveness'

'selfishly' as they 'compete' against others to pursue their own reproductive-replicative fitness.[38] In fact, the descriptors of 'selfishness' and 'competition' are not limited to obvious 'conflict' behaviours but are used to cover nearly every form of successful behaviour (Barash 1982: 18). Even behaviours which are non-confrontational and non-interfering with others are interpreted as a type of passive 'competition' on the basis that, as resources are limiting, any individual's consumption means there is less for another. By simply taking the resources required for its basic needs, an organism is implicated in the act of 'selfish competition' – as Evelyn Fox Keller notes in her analysis of this view, individuals are seen as "locked into a life and death struggle not by virtue of their direct interactions but merely by virtue of their existence in the same place and time" (Fox Keller 1992: 70).

The selfish rhetoric is also seen as encompassing 'cooperative' ventures, such as when individuals act together to obtain a food resource or in defence against predators. Sociobiologists observe that natural selection has only led to individuals engaging in such coordinated efforts because it provides a means by which the individual stands to gain more than if it had acted on its own (Trivers 1985: 391; Alexander 1985: 12-13). 'Cooperation' occurs because the benefits of protection and additional food to the individual outweigh the costs involved in aiding others in the 'cooperative' act – benefits which are then invested into the individual's increased reproductive success and the replication of its genes. So, as selection is for any behaviour or trait that enhances reproduction-replication, 'cooperation' is positively selected for (Barash 1982: 115). Sociobiologists have surely rightly described the basis upon which 'cooperation' is effected in nature, and their insights into such reciprocal forms of 'altruism' will be considered in more depth in Chapter 5. More problematic is, as Rolston notes, their view that such 'cooperation' is

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between individuals, as they 'vied' in the "Struggle for Existence", an "economy of *nature" which he described using metaphors such as 'selfishness' (e.g. Darwin 1988:* 46-48).

[38] The issue here is not that of human motivation or intention although, as Chapters 4-6 will show, this 'selfish' description of the behaviour of individual organisms in the natural world is the basis upon which sociobiologists consider that humans are naturally selfish in motivation.

essentially 'selfish' (Rolston 1999: 234). The sociobiological construal is that by 'cooperating', the individual is 'outcompeting' others who are less 'cooperative' in its population – it is only enacting behaviours which help others as it is ultimately 'selfishly' promoting its own reproductive and replicative fitness over that of others. As Fox Keller says, even where 'cooperation' is observed, 'competition' is seen as the fundamental explanator – the 'competitive' descriptor is treated as “both phenomenologically primary *and* logically prior” (Fox Keller 1992: 68). So, 'selfish' genes tend to produce 'selfish' individuals who 'outcompete' other conspecifics either directly by 'winning' in 'conflicts' and 'fights' for resources or indirectly by being more effective than others in sequestering resources including through 'cooperation'. Dawkins expresses it in the following way: “Animals are sometimes nice and sometimes nasty, since either can suit the self-interest of the genes at different times” (Dawkins 1998: 212). The issue of whether 'selfishness' is a good description of these observed behaviours is discussed in Section 2.3.1 (and later in Chapters 4-5) which draws attention to the many aspects of behaviour which do not fit with the sociobiological selfish rhetoric, in particular, the reproductive act itself.

It is because selection effects individual reproductive and gene replicative fitness that George Williams, in his work *Adaptation and Natural Selection*, argued that the process is a “blind” and “short-sighted” commitment (Williams 1974: 4; see also 1993: 228); one in which traits can arise that may negatively affect the perpetuation of the species, and which may not even benefit the life of the individuals themselves (Williams 1974: 27-28; 2001: 69-81). One cited instance of this is the ornamental displays of males which increase their reproductive success, as females preferentially choose males with larger displays, but which hamper other aspects of their life such as their ability to go undetected by predators and may, consequently, reduce the viability of the species in the long-term (Williams 1974: 28). Where benefits do accrue to individuals and species, Williams contended that they do so simply as secondary by-products of the process. This is an important tenet in

Sociobiology and Williams' work is considered by many as a classic within the discipline (e.g. Barash 1982: 133). Williams is unequivocal that the occurrence of such successful reproducers who have maladaptive traits, ones that occur to the detriment of the individual and/or the species, are evidence of there being no divine intention in nature (Williams 2001: 212-213). Undoubtedly, Williams insistence on the 'short-sighted' focus of natural selection gave further support to the selfish metaphor that characterises the sociobiological view of nature, for the process is conceived of as narrowly concerned with the replication of the genes and the promotion of individual reproduction, irrespective of any wider effects. This view will be considered in Sections 2.3.1 and 2.3.2 where it will be contended that, in fact, reproductive and replicative fitness can be linked to wider species benefits.

The assumption made throughout this section is that evolution proceeds through the process of mutation and natural selection. Indeed, sociobiologists presume very heavily upon this being the only, or by far the most predominant, means of evolution. This is not only necessary for their characterisation of nature in terms of 'selfish' entities but, as will become clear in the next chapter, it is the required assumption for their explanations of human behaviour, including human benevolence. Yet, this view must be somewhat attenuated in the light of scientific evidence. Stephen Jay Gould and Richard Lewontin have long argued for alternative mechanisms in evolution such as genetic drift where, by happenstance, a small group of individuals becomes separated and isolated from the main population resulting in the "fixing" of certain genes in the new group by means other than selection (Gould & Lewontin 1979: 581-598).[39] Lewontin has recently argued for an acknowledgement of niche construction, the process in which organisms by changing their environment thereby contribute to their own

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[39] In this work, Gould and Lewontin also suggested a number of other mechanisms in evolution such as pleiotropy or allometry where natural selection for one aspect of the organism gives rise to certain secondary features. Another alternative postulated is that of 'spandrels' where the body plans of organisms are so integrated that prior adaptation constrains the possibilities for further adaptation. So, while natural selection occurs, it is limited and 'directed' by a variety of constraints including developmental and architectural ones.

evolution (Lewontin 2000: 54-56; also Jones 2005: 14-16). The new studies of epigenetic systems have shown the existence of a lamarckian style of inheritance where the levels of gene expression in an organism are modified by its environment – effects which can be inherited for at least several generations (review by Pigliucci 2005: 565-566).

One of the main challenges to the dominance of the mutation-natural selection theory has come from the biologist Lynn Margulis whose work has become widely accepted in the sciences. It is Margulis who postulated that the major transitions in biotic evolution, such as the emergence of the nucleated cells found in higher organisms, have come about as a result of the symbiotic partnerships forged between earlier forms of biological life. Margulis sees her symbiotic perspective as offering an alternative to the normal neo-darwinian theory. So, Margulis and Dolan say: "Random mutations in DNA, so accredited with power by the neo-darwinists, lead to small, mostly harmful changes. Mergers of symbionts lead to large, functional evolutionary jumps: new organisms or major new groups of organisms" (Margulis & Dolan 1997: 48). Although Margulis does not dismiss entirely the mutation-natural selection process, she delimits it to being a modifier of the novelty generated by symbiosis – it offers a means of fine-tuning the adaptive features produced by the larger "heritable discontinuities" of symbiotic mergers (Margulis 1997a: 272).[40] Notably, the effect of such mergers is improved survivability and reproduction – it is natural selection acting, not at the level of the gene mutations, but at that of genome symbioses (e.g. Maynard Smith & Szathmáry 1995: 191ff). As gene mutation-selection is central to Sociobiology, it will be the assumed means of evolution in this thesis. It is suffice to note here, however, that although it is a key aspect, there are many other elements that also contribute to the evolutionary

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[40] Margulis is certainly aware of the political and ethical implications of her work – she compares her 'cooperative' interpretation of evolution as based on symbiosis over and against the 'competitive' scheme of natural selection proponents (Margulis 1997b: 298; 1997a: 277; see also Ryan 2002: 64-65). It should be noted, however, that she uses 'cooperation' and symbiosis in its widest sense and includes originally parasitic relationships – for example, chloroplasts are thought to have originated as pathogens that were assimilated because the host could only achieve partial digestion of them.

process.

2.3 A Critique of the Sociobiological 'Selfish' Interpretation of Nature

2.3.1 A Revision of Individual 'Selfishness': 'Sacrifice' in Reproduction and its Sustaining of Species

Sociobiologists, as was noted above, are keen to emphasise the 'competition' and 'conflict' that occurs between individuals in their protection of territory, and securing of food resources and mates. This is seen as the 'ruthless self-interest' of individuals that is engineered by the genes. There is no doubt that 'competition' does occur, as do 'fights' between contemporaries of many species although these are usually ritualistic and not deadly. The expansion of the 'competitive' descriptor to most, if not all, behaviours, and the consequent depiction of nature as essentially 'selfish' has, however, not gone unchallenged. As Holmes Rolston notes, the categorisation of 'cooperative' ventures as fundamentally 'competitive' and 'selfish' is inherently problematic as in these relationships, several partners, along with their subsequent progeny, benefit (Rolston 1999: 235; discussed further in Chapter 5). In 'passive competition', the very fact that organisms seek to extract from their environment all that is required for their own somatic (bodily) existence is considered 'competitive' and 'selfish' on the basis that, as resources are limiting, each is securing its requirements at the expense of another. If this is 'selfish', then what is to made of those behaviours which, as Fox Keller notes, “effectively generate new resources – or either increase the efficiency of resource utilization or reduce absolute requirements” (Fox Keller 1992: 71)? Since these behaviours contribute to the total resource available to others by making novel contributions or reducing consumption, they are necessarily “directly damaging to the principle of self-interest” (Fox Keller 1992: 71); and perhaps should be categorised as 'giving' and 'self-restraining'. Yet, such metaphors do not appear in the sociobiological catalogue of natural behaviours. It should also be noted that wild animals, as well as plants, tend to extract only what is required – not more. The 'selfishness' where an excess is taken is largely limited to the human phenomenon of greed.

In fact, as successful individuals are the ones that garner sufficient resources to make them more reproductively successful, the descriptor of 'selfishness' is also problematic at another level. In the very act of reproduction, the individual expends its energy and takes risks in order to invest in as many viable offspring as possible.[41] If organisms 'compete' for resources and mates, they do so in order that they can reach sexual maturity and from then on utterly expend themselves in producing, and providing for, as many viable young as possible. Individuals that are successful in 'competition', are the ones that then *spend* themselves in producing progeny. It must be remembered that courtship, nest-building, birthing and feeding young are energetically extremely costly, and at times risky, ventures. If the individual 'competing' to secure resources is phenotypically 'selfish', then it is also phenotypically 'self-giving' or 'sacrificial' as the individual secures these resources so as to spend them in providing, caring, risk-taking and protecting its offspring. Richard Alexander, himself, acknowledges that parental effort is "phenotypically sacrificial" (Alexander 1987: 41).[42] In fact, it could be said that the individual is only instrumentally being 'selfish' as its ultimate aim is the 'self-giving' or 'other-directed' production and care of progeny. The sociobiological rejoinder, by those like Alexander, is that although from the point of view of the individual, this is 'unselfish' and even 'sacrificial' behaviour, it is motivated by the 'selfish' actions of the genes and their need to replicate themselves through reproduction (Alexander 1987: 41). This view of 'selfish' genes is the subject of the next section, for now the matter turns to the relation between individual reproductive fitness and the species.

In the sociobiological view, selection generates individual reproductive

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[41] Dawkins helpfully points to the many mechanisms which cause parent animals to generate the largest possible number of viable progeny (Dawkins 1989: 109-139).

[42] Contra Trivers who defines a 'selfish' act as that which enhances the individual's reproductive success over that of others (Trivers 1985: 586) – a view which ignores the fact that reproduction is itself 'sacrificial' with respect to the parent individual.

fitness, 'oblivious' to, and sometimes at the expense of, both individual survival and well-being, as well as the long-term gains to populations and species (Williams 1974: 26-28; 2001: 69-81; 1978: 211-212).[43] This view is also expressed by others like Barash: “Benefits to a species, then, are largely incidental by-products of natural selection” (Barash 1982: 19). This apparent commitment of selection to short-term gains is, undoubtedly, seen as supporting the sociobiological characterisation of nature as 'selfish'. There is a limiting bias which allows traits to arise that are detrimental to the individual's well-being and survival and/or to the perpetuation of the species – as was mentioned in Section 2.2, this is seen as proof that “blind”, naturalistic processes, rather than divine providence, direct the evolutionary course (Williams 2001: 212-213).

Yet, it seems reasonable to correlate reproductive fitness with the sustaining of species. This is so because for phenotypic adaptations (and genes) to be tested by their relative contribution to reproduction, the organism must first reach the adult stage (in order to engage in reproduction) by passing successfully through the series of stages from embryo to adult. It must, therefore, exhibit sufficient survival fitness at each of these levels. Reproductive fitness is dependent then, not just on adaptations to the reproductive act, but on the increased survivability at each of these preceding stages. As reproductively successful individuals will pass their genes onto more progeny, the effect will be a population and species that contains individuals that are fit both in terms of reproduction and survival. This surely supports the maintaining of the species as individuals persist and reproduce more and more of their kind[44]. Indeed, Williams himself acknowledged that, by and large, the consequence of increased individual reproductive fitness is the increased survivability of the whole species. He concedes that: “Usually,

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[43] In *Adaptation and Natural Selection*, Williams argued for this over and against group selection theory which will be discussed in Chapter 6.

[44] Whilst Darwin saw natural selection as leading to individual survival fitness, he did not seemingly associate this with species survival – Darwin's focus upon individual fitness over and against such wider benefits is a point described at some length by Michael Ruse (1993a: 48-54).

but not always, the presence of an adaptation causes the species to be more numerous and widespread than it would be without it" (Williams 1974: 290).

While overall benefits do accrue to the species, Williams cites examples where this relationship between reproductive fitness and species fitness is not maintained (Williams 1974: 27-28). One example, already mentioned in Section 2.2, is the occurrence of reproductive adaptations that compromise the overall survivability of a species such as the ornamental and elaborate displays that represent an excessive metabolic demand on its bearer and make it more susceptible to predators (Williams 1974: 28; see also Williams 2001: 40-41; Mayr 1991: 88). Such ornate adaptations are thought to increase individual reproductive success but simultaneously decrease the well-being and longevity of its bearer, and so place the species at increased vulnerability to population loss and possible extinction. He also notes that species may become increasingly specialised to their particular ecological niche, and while this may further individual reproductive ends, the result may be that the species becomes restricted to this niche and is more vulnerable to any ecological changes that occur within it (Williams 1974: 27). Reproductive fitness can be at the expense of species survival.[45]

In response, it is worth considering the examples given by Williams. Certainly, the problem of excessive ornamental displays continues to be a subject of discussion in evolutionary science (see review by Levy 2002). There are two main interpretations of its occurrence, firstly, like Williams, that it represents a severe hampering of the organism with the consequence of the reduced physical fitness of the individual and species vulnerability. The

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[45] Sociobiologists also argue that species do not always garner the most optimal adaptation – "ecological necessity does not guarantee the trait will emerge" (Williams 1974: 31; also Futuyma 1979: 28). It is worth noting that the naturalist Simon Conway Morris has come to a somewhat different conclusion with regard to this in his study of the adaptations of species worldwide. He points to the many instances where separate lineages in plants and animals, and especially mammals, have evolved similar adaptations to ecological pressures – ranging from movement, mechanisms for capturing prey and carrying young (Conway Morris 2003: 131-141). There are some features that seem to be the best means of executing certain requirements and they have evolved time and time again.

second view, in contrast, stresses the observation that such displays persist in species over long periods of time and seemingly do not *de facto* mean its decline. It is thought that the organism finds ways to compensate for its "defects" or "handicaps" as they are often called (see discussion in Netting 2000). In fact, they are thought to be an advantage in sexual selection as they demonstrate the improved survival fitness of the male to potential females as the male's fitness is such that it can compensate for the 'handicap'.[46] Indeed, the display may form the driver for further survival adaptation in the species. The matter of whether such phenomena are an overall advantage or disadvantage to the species is beyond the remit of this discussion, it is suffice to note here that the issue is more complex than Williams allowed. It is not clear from this example that reproductive fitness necessarily compromises the viability of the species.

Consider the other scenario proposed by Williams where there is a loss of a species from an area due to genetically encoded features such as niche specialisation. Assuming that such events occur (and there is evidence to the contrary)[47], this is certainly a loss for the species but not necessarily for the ecosystem. It provides the opportunity for new species to enter the system or for a previously existing one to expand. Where many species are lost at a single time, the result is not usually the collapse of all biotic life but the replacement of the older ecosystem by one involving new types and relationships. Even the catastrophic and large-scale demise of species, such as was seen at the end of the Cretaceous era, was succeeded not by an irrevocable breakdown of biodiversity but, after a relatively short period, a burgeoning of even more types, including the mammals which led to the emergence of humankind (see Finlay 2004: 50). If a divine mind is concerned with creation, then it seems likely that this interest will not bear only upon one

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[46] Some consider the 'handicaps' are used to 'deceive' females about the male's improved fitness, others like Zahavi argue that the processes are completely 'honest' (see Netting 2000).

[47] Studies suggest that extinctions occur as a result of happenstance, such as major changes in ecological conditions, rather than for genetic reasons (see Raup 1991: 127) – whether adaptiveness to the niche or other forms of genetically mediated fitness.

species at a time but will be considerate of the multitude of species that interact to form an ecosystem, and moreover, not of a single time-bound ecosystem but its many temporally succeeding forms. So, even if niche adaptation leads to species loss, from a wider ecological perspective, this allows the flourishing of alternative and new species types.

Granted that, as was argued above, reproductively successful individuals are generally good for the species, what then of the reproductively unsuccessful individuals that, due to their less advantageous genes, die prematurely or simply fail to reproduce? According to sociobiologists, these individuals represent an inherent 'wastefulness' in evolution and the 'blind stupidity' of nature (see Rolston 1999: 27). The energy and resources in parental care, food and so on that have been invested in these individuals are 'wasted' by their failure to reproduce. From the point of view of the individual (and its genes), this does, indeed, seem a futile expense. Yet, it is not the only perspective for, in contrast, Rolston compares the selection process, with its generation of both better adaptive and less adaptive types, to a problem-solving mechanism in which a number of potentially adapted variants (individuals) are tested for their suitability against the environment. As the more effective individuals are the ones that pair off together in reproduction, their more adaptive traits are then combined and the screening process repeated in the next generation to provide even more adaptive solutions (Rolston 1999: 31-37). In fact, Rolston notes that if all individuals in a population had a perfectly adapted phenotype, they would be unable to "track any environmental changes" (Rolston 1999: 29) and would presumably go extinct in the face of ecological change. The process and its production of a range of types instead means that there is always a variability in the population that gives it the 'plasticity' to survive most changes (unless drastic) and adapt to new environments – a 'smart' process in which less successful types are a necessary component. It is because of this that species are not endlessly succumbing to extinction through features such as the niche over-specialisation mentioned above. As Rolston notes: "Evolutionary genesis depends upon... individuals, both winners and losers, to comprise the variation over which natural selection can act" (Rolston 2001: 50).

Even Rolston's 'smart' process, however, is not necessarily the full picture for consider the scenarios that are statistically likely to be the fate of non-adaptive types. The most seriously deleterious mutants will die in the very early stages of embryonic development and so will not necessitate the investments such as parental care. The lives of the ones that survive, even if they do not reproduce, will often participate by helping in the rearing of another's young, contributing to group defence or simply by "attracting away the attention of a predator" (Domning & Hellwig 2006: 51). In fact, where the less fit organism becomes prey, it supports the continued existence of those more fit in its population who are thereby not taken, as well as the individual of another species, namely, its predator.[48] Even death, from the ecological perspective, is never 'wasteful' as a decaying corpse will provide the organic material that constitutes the mainstay of life – the soil (Domning & Hellwig 2006: 51). So, from an ecological point of view, it may even be said that reproductively unsuccessful organisms are of as much import to sustaining species as the successful ones. This contribution to the sustaining of species, as the next section will argue, can also be seen at the genetic level.

2.3.2 A Revision of the 'Selfish' Gene Theory: 'Cooperative' Genes and Species Benefits

Since Dawkins' publication of *The Selfish Gene*, objections have been raised with regard to the appropriateness of associating such rhetoric as selfishness with inanimate entities like the gene. As Mary Midgley notes, its usage here refers to effects and not intentionality – the gene obviously has no conscious motivation and the process by which it increases (or decreases) its

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[48] It should be noted that this latter feature, the preferential culling of non-adaptive types by predators also acts to delimit the size of the prey population and often prevents it from swamping its niche and over-exploiting its food source, the result of which would be population loss due to starvation – some predators, although not all, are essential in regulating prey population size (Mackenzie, Ball & Virdee 2001: 114-115).

representation in the gene pool is a passive one (Midgley 1985: 116; also King 2002: 104-106). Those like Dawkins are aware of this criticism (Dawkins 1989: 278) but retain the metaphor on the basis that the effect of successful genes to be 'self-preserved' down the generations is sufficiently synonymous with the human idea of selfishness. Even the concept of gene 'self-preservation' is, however, problematic for, as Alister McGrath points out, selection theory also assumes that genes are subject to mutation for this is the means by which new variant genes arise (McGrath 2005: 36-37). In fact, there tends to be a variability in genomes with some regions being more prone to mutations and others being highly conserved. So, presumably then, only the genes that maintain their integrity over the generations and do not mutate are 'selfish', while the others, those that are more labile (subject to mutation), are 'unselfish'? If so, then genes like the *Hox* genes which are absolutely required for embryonic development and show a high degree of conservation over species are 'selfish' while those in hot spot regions of high mutation are the converse. It may, of course, be said that genes exhibit 'selfishness' over differing time frames. Yet, surely the better perspective is that from the level of the organism – the strict requirements for development mean that genes like the *Hox* are conserved while those involved in responding to more variable conditions are more mutable – both of which prove to be adaptive for the organism. 'Self-preservation' need not indicate 'selfishness' as both 'self-preserving' and 'self-labile' genes benefit the organism.

Moreover, intrinsic to the idea of a 'selfish' gene is not just that the gene must exhibit sufficient stability over time but that it must contribute to the organism's reproductive success through its positive relations with all the other genes in the genome. Especially in higher-order organisms, where several genes contribute to a single trait and each gene product itself may have multiple functions, the consequence is that the genes must be switched on and off appropriately in a highly sophisticated manner. This is necessary for there to be normal development and appropriate phenotypic expression of the organism. Thus, in a successful individual, the so-called 'selfish' genes must have both a coordinated action and a 'cooperative' effect – the genes must 'coact' and 'cooperate' (Rolston 1999: 72f). Dawkins himself acknowledges the necessity for genes to 'cooperate': “Selection has favoured genes that cooperate with others”; “To survive in the long run, a gene must be a good companion” (Dawkins 1989: 47; 1995: 5). This is also the view of others committed to the sociobiological paradigm such as Alexander and Trivers (Alexander 1981: 512; Burt & Trivers 2006: 2). Although this *'cooperation' is between the genes within a single individual, it also refers to* the 'cooperation' of genes within a species for it is as particular genes interact in the gene pool that those which are most 'cooperative' with each other ('co-act' to produce reproductively successful individuals) are selected (Dawkins 1998: 213-214, 217; 2004: 359; 2000: 236). In fact, Dawkins says “we have a picture of teams of genes all evolving toward 'cooperative' solutions to problems. The genes themselves don't evolve, they merely survive or fail to survive in the gene pool. It is the 'team' that evolves” (Dawkins 2000: 209).

Nevertheless, he insists that the genes only make such a functional contribution because this ensures their own short-term replicative success. They 'cooperate' only because it provides the most effective means for them to replicate themselves – “it is an anarchistic, 'each gene for itself' kind of cooperation” (Dawkins 1998: 218). The “fundamental assumption” is still “that genes are selfish entities, working for their own propagation in the gene pool of the species” (Dawkins 2000: 237). Dawkins maintains this view on the basis that the 'cooperative' gene is the one that is maintained in subsequent generations – the effect of its continuance, despite its 'cooperative' action, is sufficient grounds for the 'selfish' descriptor. Consider, however, the effect of such a gene, not just at the level of gene frequencies but at that of the individual and species level. It could be said that 'cooperative' genes generate individuals that are more reproductive because they tend to be more robust – better equipped to survive. This increased survival and reproductivity both surely feed into maintaining populations and the species as a whole – a point made in the section above. The effect of 'cooperating' genes is their contribution to the higher levels of the individual and species. Interestingly, Dawkins sees gene 'cooperation' as having even wider benefits for ecosystems and the evolutionary process itself. He says of species that interact in ecosystems, that the genes of these species may also 'cooperate' (Dawkins 2000: 236-237) – there is a interspecies 'cooperation'.[49] There may also be an 'antagonism', such as that between the genes of predators and those in prey species, but even this process is one that propels evolution forward leading to "progressive", complex "designs" (Dawkins 2000: 237).[50] Yet, despite these wider accrued benefits to species and toward evolutionary complexity, Dawkins is adamant that these interacting genes and gene pools should be seen as "an anarchistic federation of selfish genes", a description which he sees as "good poetic science" (Dawkins 1998: 221). Yet, as genes must be categorised on the basis of their effects, what is so 'selfish' about genes that 'cooperate' to promote individual and species survival, and that impel evolution toward the emergence of complexity?

In fact, in a very recent work by Austin Burt and Robert Trivers, the latter of whom has written widely in support of Sociobiology, it is argued that as most genes benefit individual survival and reproduction they are essentially 'cooperative', and only a minority merit the descriptor of 'selfish' (Burt & Trivers 2006: 16). So, rather than being a ubiquitous term for all genetic material, Burt and Trivers state that, in contrast to Dawkins who "used it to refer to all genes", the "selfish gene" term should be "used almost exclusively to refer to the minority of genes that spread at cost to the organism" – it describes only a particular class of genes (Burt & Trivers 2006: 16). In fact, a consideration of the truly 'selfish' genetic material in Section 2.3.4 will show

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[49] Presumably this relates to 'cooperative' relations between species such as in the fish host-cleaner scenario where it could be argued that a gene A that increases the cleaner fish's effectiveness in locating parasites in the mouth of hosts, will increase in frequency in the presence of genes like gene B in the host, which enhance the chances of the host opening its mouth for cleaning.

[50] Where, for instance, a genetic innovation in a predator that makes it more successful in acquiring prey, leads to selection pressures which effect a 'counter move' in the prey species.

that even here, the ascription of 'selfishness' is problematic. The work of Burt and Trivers is a major revision within Sociobiology and although it remains to be seen whether it will be incorporated in future sociobiological writings, it is a view which this section has indicated is entirely appropriate. Indeed, the next section of this chapter addresses the genetic processes that occur in sexual reproduction, for it is reproduction itself that ensures genes are 'cooperative' rather than 'selfish'.

2.3.3 Sociobiology and the Special Problem of Genetic 'Unselfishness' in Sexual Reproduction

In the paradigm of the 'selfish' gene, sexual reproduction is an anomaly. Dawkins describes it as a “paradox” and “bizarre perversion” and acknowledges that its existence is hard to justify from the perspective of the 'selfish' gene (Dawkins 1989: 43-44). George Williams speaks of there being a “crisis” in evolutionary biology because “sexual reproduction in higher plants and animals is inconsistent with current evolutionary theory” (cited in Rolston 1999: 97). Christopher Wills in his review of this issue refers to it as “one of the most intractable problems in biology” (Wills 2003: 44). The reason for this is that, in sexual reproduction, the genes of an individual are shuffled and divided in half, with only one of the halves making it into any individual of the next generation. From the view of 'selfish' genes this is an incredible risk as each gene copy has only a 50% chance of making it into the genome of each of the offspring. It is this impartial or fair manner by which genes are transmitted down the generations in sexual reproduction that ensures that the genes that are selected are those that 'cooperate' to posit beneficial contributions to individual survival and reproduction (Burt & Trivers 2006: 2-3, 16). As each gene has an equal probability of being transferred to progeny in reproduction, the outcome of each (its replicative success) is determined by the contribution it makes to the survival and reproductive success of the individual offspring to which it is passed. It cannot achieve replication without being tested by natural selection for its ability to 'cooperate' with the other genes and generate benefits to individuals. This “avoids the introduction of an arbitrary bias into the genome, one that would warp gene frequencies away from what is optimal for phenotypic function" (Burt & Trivers 2006: 3).

The situation is made even more bizarre from the 'selfish' perspective when it is realised that sexual reproduction in most species is biased against the interbreeding with kin, and towards pairing with an unrelated member.[51] This means that in each progeny, the 50% of the genes derived from one parent individual are combined with 50% of a completely different set of genes from the non-kin mate. As Rolston says, from the sociobiological view, one would expect the reverse as mating with near kin, such as siblings, would best preserve replica genes (Rolston 1999: 99). By such interbreeding, a gene would be replicating itself along with the copy of itself found in the sibling, yet, this is not what occurs (Rolston 1999: 99).[52] This point will be returned to in the discussion of kin 'altruism' (Chapter 4). It is strange, indeed, that 'selfish' genes are directed toward the reproductive fitness of the individual but that reproduction itself is very 'unselfish' and even 'sacrificial' with regard to the genes which must be divided up and combined with a completely new and alien set. It is also worth noting that sexual reproduction is not a rare event. Since its appearance prior to the Cambrian period (Williams 2001: 108), more than 600 million years ago, it has become almost ubiquitous. It is characteristic of most plants and of 999 out of every 1000 fauna (Rolston 1999: 98). This "bizarre perversion", as Dawkins refers to it, is a norm in biotic life and has been so for a relatively long time.

Sociobiologists have made several divergent attempts to explain the origins of the phenomenon of sexual reproduction but, as yet, it remains elusive. In *The Selfish Gene*, Dawkins suggested that although sexual reproduction does not suit the 'selfish' purposes of nearly all the genes in a genome, it, at

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[51] This is true not only of animals where incest seldom, if ever, occurs in wild populations (see Rolston 1999: 99) but also for plants where many have mechanisms that prevent self-pollination.

[52] The issue of assortative mating, the argument that organisms choose mates as much alike themselves as possible, is discussed in Section 4.3 which shows the limits of this as a possible counter to the strong outbreeding that is observed in nature.

least, ensures the continuance of the gene(s) for reproduction. So, the "gene 'for' sexuality manipulates all the other genes for its own selfish ends" (Dawkins 1989: 44). Williams suggests that reproduction may have provided a means for the accurate editing of genetic mistakes as in the mixing of genotypes, the DNA sequence of one of the contributors can be compared with the non-kin type of the other – as they come from non-relatives, they are unlikely to have inherited the same sequence errors (Williams 2001: 109-111). Thus, sexual reproduction is the by-product of a sequence editing scheme. Another suggestion is that it is the consequence of the Red Queen effect in which there is a constant co-evolution between hosts and parasites – they are continuously adapting with the host shoring up defences against infection and the parasite enhancing infectivity. It is argued that sex evolved as a means for the host to significantly improve its defence by the generation of novel genotypes in each generation. This hypothesis finds both support and criticism among biologists (e.g. Otto & Nuismer 2004: 1018-1020; Wills 2003: 47). Williams himself prefers the explanation that sexual reproduction arose as means of generating "diverse offspring" (ones with varying genetic content) so that they may colonise new and unpredictable ecological niches (Williams 2001: 112-114). Unwittingly, Williams' proposal implies that reproduction is not about the promotion of 'selfish' genes but rather the benefits to species.

The species does indeed benefit, as sexual reproduction provides an ongoing source of variability in its constant making of new types. In fact, the enormous amount of variability that now exists would have been impossible without its galvanising of evolution beyond simply the mutation-selection of asexual reproducers. For although mutations are a source of variability "contrary to Darwin's conception, most of the genetic variation in populations arises not from new mutations at each generation but from the reshuffling of previously accumulated mutations" in the sexual reproductive process (Ayala 1978: 55). As Wills concludes: "Biologists believe sex to be essential for species long-term survival, because species that give it up usually disappear within a few hundred thousand years" – with a few exceptions such as rotifers (Wills 2003: 44). It has been an essential ingredient in the perpetuation of most species and the generation of new species – in both species conservation and biodiversity.

To summarise, in the act of sexual reproduction, genes are divided up and 'sacrificially' risked for the wider benefits to individual offspring and species. One might wonder why this aspect is so ignored by sociobiologists who prefer to talk of sexual reproduction as a paradox with regard to 'selfish' genes rather than acknowledge its genetically 'sacrificial' aspect. In fact, given the work of the above sections, it is strange that sociobiologists persist in their selfish rhetoric at all. It suggests that the conviction of 'selfishness' within nature precedes all genetic and biological considerations – it has been imported into the paradigm from elsewhere. As Colin Grant says of the sociobiological selfish rhetoric, "the tenacity with which it is held and the comprehensive scope of its influence suggest that what is involved is something much broader than Sociobiology or even than modern biology as a whole" (Grant 2001: 17). The cultural background that some see as having informed and moulded this evolutionary science is explored in Appendix 1.

2.3.4 Purely 'Selfish' DNA and its Promoting of Species and Evolutionary Benefits

Purely 'selfish' DNA, as it was described in the 1980s, refers to a segment of genetic material that can replicate itself without necessarily contributing to the organism's reproductive success (Dawkins 1989: 236-237; Trivers 1985: 137-140). This section will briefly describe what is by far the most ubiquitous form of this 'selfish' DNA, that of the transposons. These are relatively short lengths of DNA that can move and replicate themselves from one site of a genome to another (Dennis 2002: 459). They are often likened to a parasite as their replication around the genome places a metabolic burden on the host organism. It is thought that the hosts only tolerate these elements because it would be too difficult to eradicate them all simultaneously, and they would only do so if the selection pressure for energy conservation became intense (Doolittle & Sapienza 1982: 63). Transposons are acclaimed as one of the purest forms of 'selfish' DNA (Doolittle *et al* 1982: 58-59; Orgel & Crick: 1982: 67; Dawkins 1989: 45, 275).

Despite its seemingly parasitic nature and characterisation as 'selfish', transposable DNA has been shown to have some important benefits and is now recognised as a key element in the long-term survival of many species. The capacity of transposons to insert into new areas in the genome enables them to create entirely new sequences. The occasional imprecision of transposition also allows the deletion and transfer of host DNA around its own genome. While these processes most often result in deleterious mutants (individuals with lowered fitness levels), they have also given rise to entirely novel, advantageous adaptations (Bushman 2004: 255). Indeed, transposon DNA, like sexual reproduction, is thought to have been a major contributor to the "sculpting" of genomes (Martin cited in Dennis 2002: 458). They have also been shown to allow transfer of genes between species as diverse as mammals and the fly (Edwards 2000: 5). There is even preliminary evidence that they contribute to variations in brain development – assisting in the uniqueness of human "temperament and talent" (Miller 2005: 1729). These elements are also thought to be central in gene regulation, the switching on and off of genes, which has allowed the evolution of complexity to take place (e.g. Nekrutenko & Li 2001: 619-621; Cooper 2002: 30-33; Bushman 2004: 254; Mattick 2004: 62f). Thus, despite their 'selfish' label, they have contributed to the survival of their host species by providing a source of variability that has promoted versatility, long-term fitness, diversity and has allowed the appearance of complex forms of life. Doolittle and co-authors rightly refer to elements like transpositional DNA as being another of the theoretical difficulties like sexual reproduction that "plague" the 'selfish' gene explanations (Doolittle *et al* 1982: 60).

Given that the metaphors used to describe a particular genetic element stem from its *effects*, it is not clear what is the most apt metaphor for transposons. They may have a harmful effect on individual organisms but they have also generated significant benefits to clades (groups of related populations), species, the evolution of complexity and so on. Interestingly, Burt and Trivers retain the 'selfish' descriptor but under a qualification:

> To avoid one possible source of confusion, we emphasise that designating a gene as selfish does not necessarily imply anything about the effect of the gene on the host population, species, or clade. Indeed, it is entirely possible for a selfish gene that harms the host organism... to be good for the host population. (Burt & Trivers 2006: 11)

In fact, the matter is more complicated as such benefits to clades and species are based on ultimate benefits that accrue to individual organisms – transpositional effects are mediated through individual mutants, most of which will be deleterious, but those for which benefits are made will be more effective reproducers and will pass this benefit to subsequent generations of individuals. As such, elements like transposon DNA, must be said to both immediately generate mostly harmful effects on individuals but in the long-term to effect benefits to individuals, populations, species, and evolutionary complexity. The metaphor that best encapsulates this duality is not immediately clear but it is not self-evidently that of selfishness.

2.4 Conclusion

The sociobiological 'selfish' view of nature, introduced in Section 2.2, has been critically considered and it has been argued that it does not accommodate the way things are. Its vision of natural selection as genes that 'selfishly' effect their own replication and as individuals that 'selfishly' pursue their own reproductive ends, is inadequate. This is because genes in genomes 'cooperate' to posit a functioning individual that can both reproduce and survive effectively. Such reproductively successful and robust individuals necessarily make contributions to maintaining their species, and even the less reproductively successful types play an integral role to this end. Indeed, sexual reproduction, that fundamental element of the sociobiological thesis, rather than being a paradigm of 'selfishness' is shown to be one of the most 'sacrificial' elements in biological nature. In reproduction, genes are divided up and combined with new sets of genes for the formation of new genotypes, and individual organisms are expended in the 'sacrificial' or 'other-directed' production and care of progeny. Thus, the generation of individual reproductive and gene replicative fitness through this process is not characterised by 'selfishness', for it is remarkably 'unselfish' with respect to the entities themselves, but by an 'other-directedness' in its effect of supporting species. Even purely 'selfish' DNA in transposons is now acknowledged as important in sustaining species, and as an agent of biodiversity and complexity. As Chapters 4-6 will contend, this sustaining of species is also the outcome of the biological forms of 'altruism' observed in nature.

William Rottschaefer's comment reveals the paradox in the sociobiological thesis: “The ultimate end of biological selfishness includes other selves, while that of selfishness, ordinarily conceived, does not” (Rottschaefer 2000: 240). In truth, of course, genes and lower-order organisms express no conscious intentionality and can be neither 'selfish' nor 'sacrificial'. It may be that using terms such as 'sacrifice' is, as Rolston says, simply a compensatory tactic: “Sometimes one has to lean into the wind to stand up straight” (Rolston 2001: 49). Yet, the matter of which rhetorical form is used is an important one for it is on the basis of the 'selfish' renderings of individual reproduction and gene replication that sociobiologists see the acts of 'altruism' in nature as essentially 'selfish'. Since this interpretation of 'altruism' is an extension of the issues discussed in this chapter, the insights brought to the fore here will be drawn upon in the critique in Chapters 4-6. It is also on the basis of the 'selfish' characterisation of reproductive-replicative fitness that sociobiologists interpret human benevolence as both essentially and motivationally selfish;

as 'selfish' in effect and selfish in psychological intention. It is a view which itself presumes that human nature is subject to natural selection for only then can the issues of reproductive-replicative fitness become defining in human benevolence. The next chapter addresses the key presumption which lies at the basis of the sociobiological renderings of human 'altruism' – the idea that humans, their behaviour and attitudes, are determined by natural selection.

Chapter 3: Sociobiology and Its Presumed Hegemony in Interpreting Human Nature

3.1 Introduction

Sociobiologists assume an authoritative role in human affairs on the premise that human behaviour and culture have been primarily, if not wholly, shaped and moulded by the evolutionary process of natural selection. Indeed, Charles Lumsden and Edward Wilson rightly speak of the primacy of natural selection in defining social behaviour as the “central tenet of human sociobiology” (Lumsden & Wilson 1981: 99). This is because it is only so far as human social traits, along with cultural values and norms, are subject to natural selection that sociobiologists can lay claim to having a comprehensive knowledge of human nature. It is the basis upon which sociobiologists consider that they offer a full and accessible account of human moral behaviour, including that of 'altruism'. It should be noted that the sociobiological claim is not that natural selection explanations of human behaviour are prescriptive, a basis for the *ought* of human behaviour, but that they are largely complete in their descriptive and explanatory power. So, as Michael Ruse says, whilst Sociobiology does not provide an objective morality, there is very little of human behaviour, including morality, that cannot be described by their evolutionary approach (Ruse 1993b).

It is the purpose of this chapter to critically examine the sociobiological basis for assuming this supervening status of natural selection. The aim is not to engage at full length on the matter but only at sufficient depth to show that, in fact, human behaviour, cultural ideas and values are not entirely subject to the evolutionary selection process. This chapter will show that there are convincing reasons to consider that humankind possess the capacity to generate behaviours and cultural ideas that go beyond the constraints of natural selection. This point is important for the discussions of human 'altruism', which form the subject of the next chapters, for it is insofar as natural selection is shown to be relevant only to some aspects of human behaviour that the sociobiological paradigm must give up its assumed authoritative depiction of human benevolence, and give way to other forms of explanation. Yet, even at this juncture, it must be recalled that the argument throughout this thesis is not that natural selection is itself problematic for, as Chapter 2 has shown, contrary to its characterisation in terms of being 'selfish' and 'short-sighted', it entails aspects of 'sacrifice' and is a primary force for sustaining species and ecosystems. Thus, the issue is not natural selection per se but whether it provides an entirely sufficient explanation for human behaviour and culture.

Interestingly, whilst sociobiologists are united in their commitment to the centrality of natural selection in forming human behaviour and culture, they are not in agreement on how natural selection effects this control. There are those like Wilson and Lumsden who posit a 'strong' co-evolutionary approach in which there is a tight association between the genes and human behaviour. The consequence of this approach is that natural selection effects the formation and evolution of behaviours in precisely the same way that it does for other morphological and physiological features, that is, by the differential survival of mutant genetic variants. Richard Dawkins postulates an alternative view which, although supportive of the genetic basis of some behaviours, contends that human behaviour and culture are too complex to be defined simply by the genes (Dawkins 1989: 191). Dawkins suggests, instead, that human behaviour and culture are affected by the movement of ideas, termed memes, from mind to mind through a selection process which is analogous to the genetic one. Both of these perspectives, which argue for the primacy of natural selection, will be reviewed and critiqued below. With regard to the co-evolutionary approach, it will be argued that while there is certainly some supporting evidence for its correlation of human nature with the genes, it does not provide a full explanation (Section 3.2). It will be concluded, instead, that only a 'weak' version of the co-evolutionary approach is supportable, one in which *some* features of human behaviour and culture can be accounted for on the basis of genetics and are therefore liable to natural selection, while others are not. In contrast to this attenuation of the co-evolutionary view, it will be contended that the memetic theory of Dawkins has very little to warrant its support (Section 3.3).

3.2 A Critique of the Sociobiological Co-evolutionary Theory

In the co-evolutionary approach proposed by those like Lumsden and Wilson, a tight linkage is made between genes and behaviour, and subsequently culture – genes direct, or at least constrain, individual behaviour, and individual behaviours feed into and constitute culture (Lumsden & Wilson 1981). This genetic basis means that human behaviour and culture emerge through the process of natural selection acting upon genetic mutations, one in which variants are selected for their capacity to confer evolutionary advantage, specifically differential individual reproductive and genetic replicative success. This 'strong' co-evolutionary scheme, although sometimes derided as a simple genetic determinism of behaviour and culture,[53] is presented by its advocates as an interactionist model where behaviour is considered to be the result of both genetic inheritance and environmental factors such as experience. So, John Tooby and Leda Cosmides speak of every feature as being "codetermined by the interaction" of both nature and nurture – genetics and environment (Tooby & Cosmides 1992: 82-84).[54] This interactionism is also accepted by 'weak' theories of gene-culture co-evolution, and indeed even antagonists to Sociobiology like Richard Lewontin, recognise that genes play a role in human behaviour and may contribute to culture (Lewontin 1991: 26).

Nevertheless, the difference is in the degree that is attributed to genetics for although these sociobiologists are adamant that they are not genetic

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[53] In *Not in Our Genes*, Stephen Rose, Richard Lewontin and Leon Kamin strongly criticise the seeming genetic determinism of co-evolutionary sociobiologists (1984: 236f).

[54] Tooby and Cosmides are evolutionary psychologists, not strictly sociobiologists, but the disciplines are very closely related despite the differences noted later in this section and in footnote 4.

determinists (e.g. Alexander 1980: 98-99; Barash 1982: 29), they clearly place a very strong emphasis on the role of the genes. It is only by so doing that they can support their view that human behaviour is subject to natural selection, and along with culture, is adaptionist. Thus, whilst they acknowledge the role of the environment and experience, most write as if behaviour was entirely constituted by the genes. As Andrew Berry says: "Everyone calls themselves an interactionist. Yet, often when you scratch below the surface, you find a sociobiologist who marginalizes the importance" of the environment and effectively posits a form of genetic determinism (Berry 2003: 815).[55]

In the earlier days of Sociobiology, the 1970s-80s, the link between genes and human behaviour was based to some degree on the observation of human twin characteristics, but largely on the artificial selection of animal social traits in breeding experiments. The cited examples included the observation that fowl and rodents could be inbred for aggression, and the seeming genetic specifications that constrained animal learning such as is seen in bird songs (Barash 1982: 33; Trivers 1985: 98).[56] Critics like Kenneth Bock often rightly complained about the inadequate data which was used to support the very considerable sociobiological claim of the genetic basis to human behaviour and culture (Bock 1980: 84-85). With the increasing sophistication of genetic technologies, it has since been possible to begin to investigate more fully this gene-behaviour linkage. Genetic studies, for the most part, have used the mouse as the model for human social traits. These

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[55] Berry notes that the same can be said about social constructivists who effectively opt for environmental causation only. Berry's comments were given in his review of a book by Matt Ridley.

[56] A recent review of songbird learning suggests that birds do preferentially learn the songs of conspecifics over that of other species indicating an innate, genetic bias in learning (Brainard & Doupe 2002: 351-358).

experiments have shown that levels of aggression[57], hyperactivity[58], social interaction,[59] memory[60] and anxiety[61] can be altered in mice by the disruption of particular genes. While there must be caution in extrapolating genetic effects in mice to humans[62], some correlation is likely. Behavioural studies have also continued to make use of comparisons between human twins.[63] Such studies have indicated that among the most highly heritable are mental illnesses such as schizophrenia which has been linked to chromosome 6 (Drew 1997: 42-43; Plomin, DeFries, McClearn & McGuffin 2001: 74, 213); others include depression, anxiety and obsessive compulsive disorder (Plomin *et al* 2001: 219-224). The heritability of aggression (and likelihood of

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[57] The absence of the adenosine A2a receptor in mice, a gene which shows 82.9% identity with the human equivalent gene, resulted in increased aggressive behaviour such as more frequent biting (Ledent, Vaugeois, Schiffmann, Pedrazzini, El Yacoubi, Vanderhaeghen, Costentin, Heath, Vassart & Parmentier 1997: 675). Mutations in the oxytocin gene also affect aggressive behaviour in mice (DeVries, Young III & Nelson 1997: 364).

[58] A mutation in a dopamine receptor gene caused increased rearing and locomotive movement (Accili, Fishburn, Drago, Steiner, Lachowicz, Park, Gauda, Lee, Cool, Sibley, Gerfen, Westphal & Fuchs 1996: 1945-1949).

[59] The absence of the oxytocin gene in mice caused reduced parental care (cited in Ferguson, Young, Hearn, Matzuk, Insel & Winslow 2000: 284-288). Mutants in the Dvl1 gene exhibited characteristics such as reduced huddling together and deficiencies in nest making (Lijam, Paylor, McDonald, Crawley, Deng, Herrup, Stevens, Maccaferri, McBain, Sussman & Wynshaw-Boris 1997: 895-905).

[60] One well-known example is the Doogie mice that were genetically engineered to exhibit significantly longer memory retention (Tang, Shimizu, Dube, Rampn, Kerchner, Zhuo, Liu & Tsein 1999: 63-69).

[61] See, for example, the disruption of the CRFR1 gene which is involved in stress responses and led to reduced anxiety such as more time being spent in open areas (Smith, Aubry, Dellu, Contarino, Bilezikjian, Gold, Chen, Marchuk, Hauser, Bentley, Sawchenko, Koob, Vale & Lee 1998: 1093-1102).

[62] This is not only because there is no direct equivalence between a mouse behaviour with that of a human (consider the association of increased rearing in mice with the human behaviour of hyperactivity in footnote 58; see also Dennis 2005: 151-152), but also because the same gene product in one species can have a very different function in another species.

[63] Recent work attempts to separate out genetic from environmental affects by making comparisons between identical and fraternal twins, twins reared together and those apart, as well as twins that share the same chorion (immediate womb environment) and those that don't. Nevertheless, these studies are still naturally complicated by many factors, including the qualitative problem of defining a behaviour or trait, and the quantitative one as sample sizes in these studies can vary significantly. The use of twin studies is discussed in a brief review by Ohlson (2002: 43-45).

criminality)[64], IQ (intelligence quotient)[65] and extroversion-introversion[66] are also commonly cited.

Thus, despite the criticism that there is absolutely no genetic basis to characteristics such as personality, temperament and depression,[67] the results from ongoing research suggest that genes do, in fact, make a contribution. Yet, the evidence for environmental influences on behaviour at many points in human development is also accumulating. Consider, for example, the now recognised import of the prenatal conditions (the womb environment) on human behaviour[68], the suggestion that the ultimate cause of schizophrenia is a viral infection[69], and the evidence that trauma in childhood, such as sexual and physical abuse, can change the structural morphology of the brain with significant behavioural consequences. Consider also the observation that not only genetic mutations but also social status can have a significant effect on serotonin levels in primates, thereby altering levels of aggression.[70] Further, not only physical and social environments but also the thoughts and activities that are pursued have a profound effect in humans. Thus, for instance, even highly heritable traits like mental illnesses have been shown to be treatable not just by chemical supplement but by cognitive-behavioural modification therapy.[71] The effect of thought and habit upon the mind is such that "what we do and think 'sculptures' the brain"

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[64] The evidence indicating the heritability of aggression and some forms of criminality can be found in works like Hamer and Copeland (1998: 90f), Cloninger and Gottesman (1987: 96f) and Nessan (1998: 449-451).

[65] In their review, Plomin and co-authors suggest that intelligence or "general cognitive ability", defined as "verbal ability, spatial ability, memory and speed of processing" shows a high heritability of about 50% (Plomin *et al* 2001: 156-166).

[66] See Bouchard and Loehlin (2001) for a review of the studies indicating the heritability of this aspect of personality in both humans and animals.

[67] See, for example, Lewontin (1991: 96).

[68] The prenatal environment not only affects the metabolism of offspring but also impacts upon aspects such as IQ – see McGue (1997: 417-418) and Devlin, Daniels, and Roeder (1997: 468-471).

[69] Although genes may predispose the person to the illness, this new theory suggests that a virus is the ultimate causal factor (discussed in Motluk 2002b: 15).

[70] Aggressive behaviours have been linked to low serotonin levels, and studies in mice in which a serotonin receptor was blocked have indicated a genetic causation. Mike McGuire's work with vervent monkey has shown, however, that social status can also dramatically affect the serotonin levels and the frequency of aggressive displays (cited Hamer and Copeland 1998: 104-106).

[71] See Dewan (1992).

(Jeeves 2001: 87). In this regard, human choice is a powerful contributor to behaviour.[72] So, whilst human behaviour, at the level of temperament and cognitive skills, evidently has a genetic basis, it is also subject both to environmental factors (the physical and social setting of the individual) and to human intentionality and self-determination. It is together that all of these factors combine to constitute the individual. This composite depiction is a complex one which makes the sociobiological linkage of genes and human behaviour, at best, an inexact correlation.

If this connection between the genes and human personality, temperament and mental skills must be qualified by other contributory factors, what then of the more culturally engendered behaviours? At this higher level of behaviour, the role of the genes is even more tenuous. Consider the human infant born of parents of one language and culture but whose adoption into another leads to the child acquiring the language, behaviours and cultural values of its new homeland – evidently such things are not circumscribed by the inherited 30-50,000 human genes. Indeed, not only is human behaviour at this level more flexible but humans exhibit an even more pronounced capacity at this cultural level to express intentionality. So, for instance, Eastern teenagers may choose to adopt Western habits, and Western adults sometimes take on to the lifestyle and mindset of the East (and vice versa) – e.g. Rungfapaisarn (1999). Sociobiologists are aware of this human flexibility and in order to maintain a link with the genes, some have argued that even

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[72] Ullica Segerstråle perhaps rightly identifies a central issue in Sociobiology as the problem of determinism (Segerstråle 2000: 391; see for example Wilson 2001, also Radcliffe Richards 2000: 146-147). In fact, this is as much a difficulty with the extreme environmental approach of social determinists as whether the bias is toward genetics or the environment, or even a strongly interactionist view, they may be all equally determinist. Although this issue of determinism cannot be explicitly treated here as this would require a lengthy and an altogether different work, it should be noted that often, the theological approach, while acknowledging both social and hereditary factors, pays heed to that further level of interaction which is seen in human personal choice and decision-making. The theological position is, as Ian Barbour says, that there is within the human person the capacity for free will, that self-determination which permits humans, within their natural constraints, to express genuine motivation, intention and choice (Barbour 2000: 62; also 2002: 60-62). As John Bowker says, the conditions of genes and environment is what "creates the freedom of human nature to transcend biological and cultural points of its departure: constraint is the condition of freedom" (Bowker 1995: 106). This thesis will assume such a position.

this plasticity of mind can be explained by natural selection. Selective forces have favoured a more open form of learning as a means of successful adaptation to contingent events (Wilson 2000: 549; Alexander 1980: 88). Thus, Wilson says "genes promoting flexibility in social behaviour are strongly selected at the individual level" (Wilson 2000: 549). The idea that natural selection has effected this flexibility is very likely the case, however, surely such openness once established by the genes can no longer be controlled by them. Yet, sociobiologists want to maintain that the genes continue to hold ultimate sway (Barash 1982: 30; Wilson 2000: 550), and they posit this on the grounds of a gene-based theory of mind.

According to sociobiologists, there is a strong genetic underlying substrate which constrains human learning and other mental capacities. One suggested mechanism is that postulated by Lumsden and Wilson who differentiate between primary epigenetic rules in humans, such as the infant's preference for sweet foods, which are "genetically restricted and inflexible", and those more open, secondary rules where evaluation and decision-making take place (Lumsden & Wilson 1981: 41-52, 100). They argue, however, that the latter, more complex responses, are simply composites of specific, primary rules. As these simpler modules are apparently linked with the genes, they are confident that "human nature may be simpler and more transparent than we thought" (Lumsden & Wilson 1981: 345). Another suggestion is that made by Cosmides and Tooby who say that the human mind contains a number of algorithms or modules – problem solving cognitive mechanisms – with specific contents that have been defined by the genes (Cosmides and Tooby 1992: 164-166). Thus, it is the directed mechanisms that process new information in learning which have a genetic basis. In a similar view, Robert Boyd and Joan Silk argue that the human mind is constituted by a "large number of special-purpose mechanisms that solve particular kinds of problems" such that "even the most flexible strategies are based on special-purpose psychological mechanisms" (Boyd & Silk 1997: 600, 601).

While much still remains elusive on the way the human mind works, the sociobiological interpretation is certainly not the only contender on the relationship between genes and human mental abilities and behaviour. One such example is the argument propounded by the well-known geneticist Francisco Ayala who has suggested that the human intellect does indeed have a genetic basis in its capacity to reflect upon possible consequences and to make value judgements between alternative actions. This has been a highly adaptive ability that has allowed human tool making and survival (Ayala 1995: 118-121). He contends, however, that this capacity has generated the mental space and ability for the emergence of traits not linked to the genes or adaptation, ones which include the complexities of human behaviour and its cultural expression in art, literature and, not least, ethics (Ayala 1995: 117-119); they are "the indirect outcome of the evolution of eminent intelligence" (Ayala 1995: 123). Thus, he says that much of human behaviour has come about, not because it is in any way directly linked to the genes and hence adaptive, but because it is "pleiotropic" – associated with a trait, human intelligence, which is adaptive (Ayala 1995: 117-118). Natural selection has, through the genes, facilitated the judgement making ability of the human mind which is essential for survival, but with this has come a consequent openness of mind to discourse on other areas which are not constrained by selection.

It may be that Ayala's case is somewhat overstated as it seems likely that there are some gene-based mind modules which, like the birds with birdsong, supply humans with propensities for music, art and language. Certainly, as will be argued in Chapter 4, humans possess innate capacities for the progenitors of ethical conduct other than the reasoning and adjudicating ability, such as empathy and the instinct to care for one's children. Nevertheless, Ayala's point can be taken as indicating that while natural selection may generate some modules, some biases in learning, it cannot specify entirely the content; a point which is counter to that of Tooby and

Cosmides. So, just as problem solving may have applications as diverse as identifying and evaluating food resources, understanding nuclear physics and testing the logic of ethical judgements, the occasions that prompt the expression of aggression and empathy may also show individual and cultural differences. The mind has, under natural selection, been formed to generate certain capacities but also a flexibility with regard to their specific contents and modes of expression.

If human behaviour cannot be defined entirely by the genes, then this becomes even more difficult when one considers the full content of culture. One need only reflect on the swathe of complex and intricate forms of rules and beliefs that constitute human culture – its systems of symbolic language, attitudes, morals, customs, laws, music, art and ritual – all of which guide and give meaning to human behaviour (Nessan 1998: 445). There is a richness and diversity to human culture that makes a correlation to genetics, at the very least, conceptually difficult. Yet, it is not just the detail and inventiveness of human culture but its fast pace that is suggestive of its independence from genetics (e.g. Dobzhansky 1963: 146). Consider the array of ideas, values and lifestyles that have been subject to change within the last century. Cohabitation outside of marriage has become increasingly common among Western couples, Marxism saw a rise and fall in its political sway, and so on. The sheer pace of such events suggests that their linkage to genes seems a nonsense. In fact, some, such as the use of contraception to limit family size are clearly contrary to natural selection. Holmes Rolston rightly notes that as long as cultures continue to have a sufficient level of reproduction (otherwise they would go extinct), they are seemingly free to manifest a diversity of beliefs and practices, some of which may well be contrary to the natural selection outcome of reproductive-replicative fitness (Rolston 1999: 124).

Yet, sociobiologists want to maintain the primacy of natural selection over culture, and so they advocate that the incredible variety and detail of variant human cultures are ultimately superficial. They say that beneath its variations are fundamental universal laws which have been defined by the genes, and consequently by natural selection (e.g. Tooby and Cosmides 1992: 45). Some often cited examples are the observation that all cultures have developed taboos such as incest avoidance (Alexander 1980: 92), a phobia of animals like snakes and the formation of kinship units (Wilson 2000: 553f). "The genes hold culture on a leash. The leash is very long, but inevitably values will be constrained in accordance with their effects on the human gene pool" (Wilson 2001: 161). So, as Michael Ruse says: "Darwinian factors inform and infuse the whole of human experience, most particularly our cultural dimension" (Ruse 1986: 140). "Human culture, meaning human thought and actions, is informed and structured by biological factors. Natural selection and adaptive advantage reach through to the very core of our being" (Ruse 1986: 147). Indeed it is entirely reasonable that some features, such as the family unit of parent-offspring and a tendency for phobic reactions to snakes, may be universal, and for biological reasons.[73] Yet, what then of the innumerate philosophies, ideologies and religions that have also been part of the human narrative? Are they merely superficial incidentals? As Rolston says, such novel cultural ideas as the emancipation of women and of slaves are surely not "meanderings", "minor variations" and mere "surface psychology" (Rolston 1999: 154-155). The differences are real and considerable, and cannot be explained away as variants of common universal laws based on the genes.

In fact, it could be argued that the very nature of culture endorses its own plasticity. Humans, by generating the artificial environments of cities, technological advances and hospitals with their myriad medical interventions, have largely divorced the human gene pool from the selective action of ecological constraints such as climate and disease. Further, human ecological dominance is such that there are also no longer any competing species – it is not subject to evolutionary pressures created by other species. This mediation of the environment so that it is no longer a limiting factor in

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[73] The genetic basis for the parent-offspring relationship will be discussed in Sections 4.4-4.5.

survival can be seen in the fact that humans can now occupy almost every geophysical landscape and at high densities.[74] It is as Dobzhansky said: "Human genes have accomplished what no other genes succeeded in doing. They formed the biological basis for a superorganic culture, which proved to be the most powerful method of adaptation to the environment ever developed by any species" (Dobzhansky 1956: 121). Thus, it could be said that the effect of culture has been the decoupling of human genes from the control of natural selection.

Moreover, it should be noted that, among those committed to a 'strong' linkage of natural selection to human behaviour and culture, there is some considerable tension in the matter of interpretation. Sociobiologists like Wilson and Barash tend to view modern human behaviour in largely, if not entirely, adaptive terms. Evolutionary psychologists, who share the same basic premises as sociobiologists (see footnote 4), argue in converse that human behaviour is not suited to modern life but to the hunter-gatherer conditions of the Pleistocene era. The human genotype has not yet adjusted to its new ecological setting and so modern behaviour is not adaptive but largely maladaptive.[75] This difference of interpretation is significant because it shows that the proffering of explanations of human behavioural and cultural traits in terms of natural selection is far from straightforward.[76] The claim of one group that modern behaviour is largely adaptive and of another that it is mostly maladaptive is hardly persuasive of its veracity. Certainly, it suggests

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[74] Some researchers have argued that human evolution has continued albeit much more subtly. There are suggestions that as the present technological society selects for people of particular aptitudes, such as fine motor skills, and globalisation increases disease exposure (a selective pressure) and enhances genetic diversity due to cross cultural mating, evolution has continued (discussed by Cohen 2001: 24-29). In fact, studies indicate that until very recently the genes for human brain growth were evolving and may be doing so even at present (discussed by Balter 2005: 1662-1663). This must be balanced by the observation that modern society has created niches for almost every type of skill and that as medicine progresses, diseases are increasingly treatable.

[75] Steven Pinker explains the perspective of Evolutionary Psychology: "selection operates over thousands of generations. For ninety-nine percent of human existence, people lived as foragers in small nomadic tribes. Our brains are adapted to that long-vanished way of life. They are not wired to cope with... written language... courts, armies, modern medicine... high technology and other newcomers... Since the modern mind is adapted to the Stone Age, not the computer age, there is no need to strain for adaptive explanations for everything we do" (Pinker 1997: 42).

[76] This difference between the two disciplines is noted by Pinker himself (Pinker 1997: 41).

that the matter is, at the very least, complex and simplistic explanations in terms of the genes and natural selection are inappropriate. Another area of disparity is, of course, the view of those like Dawkins who reject the 'strong' co-evolutionary interpretation of human culture, seeing it as are far too complex to be tied to the genes (see Section 3.3 below). Thus, even among sociobiologists the 'strong' co-evolutionary view is not convincing. As Craig Nessan observes: “Even a thoroughgoing sociobiologist like Richard Dawkins could not describe the complexity of the human on the basis of sociobiology alone” (Nessan 1998: 445). The matter of whether Dawkins manages to maintain the primacy of natural selection on the basis of his memetic theory is the subject of the next section.

The arguments given here indicate that although some behavioural and even cultural traits may be subject to genetic influence and consequently to natural selection, there is significant evidence supporting the plasticity of human nature. This means that the adaptive paradigm of sociobiologists may well be instructive in providing some explanations of behaviour and culture but cannot be expected to accommodate the whole. Human nature is inevitably open to forms of behaviour that may transcend biological drives and instincts – a perspective which is identified as a 'weak' form of the co-evolutionist theory. It is this position that this research finds most convincing – as John Bowker expresses it, “human character and behaviour are controlled *in part* into their outcomes by constraints that precede us”, yet humans can and even “*normally*, transcend” these constraints (Bowker 1995: 112). Both behaviours that are coincident with natural selection and those that go beyond its strictures will be expected to characterise human individuals and societies.

This has important implications for the discussion of human 'altruism' for, in the 'strong' sociobiological view, any human acts of beneficence must invariably be tied to that genetic outcome of natural selection – individual reproductive-replicative success. It is for this reason, as Chapters 4-5 will show, that these co-evolutionists consider human 'altruism' can only exist in the biological (genetically inscribed) forms which occur in the wider natural world. Human 'altruism' is bound to express itself only in the ways seen in all other species, that of benefiting kin and reciprocal partners; there is no capacity to care for those outside this circle. If, indeed, selection forces were paramount then the sociobiological definition of human 'altruism', if correctly representing the biological data, would have to be accepted. Yet, as this section has shown, natural selection makes only a partial contribution to human nature and so one must expect that the space is available for other forms of behaviour and cultural/ideological sources of motivation to be involved in human benevolence. Human nature is not absolutely tied to natural selection, and consequently it is open to other influences including moral philosophies and revelatory religion.

3.3 A Critique of the Sociobiological Memetic Theory

It is the very complex nature of culture and the way in which its elements such as language, art and ritual are inherited historically that prompted Richard Dawkins to postulate the memetic theory.[77] He speaks in his work *The Selfish Gene* of his "dissatisfaction with explanations that my fellow-enthusiasts have offered for human behaviour. They have tried to look for 'biological advantages' in various attributes of human civilization" (Dawkins 1989: 190-191). He says of the 'strong' co-evolutionary approach that it does not "begin to square up to the formidable challenge of explaining culture, cultural evolution, and the immense differences between human cultures" (Dawkins 1989: 191). Dawkins suggests, instead, that human behaviour and culture are affected by cultural ideas, memes, which move from mind to mind in the same way as genes move from body to body – through a process of selection in which the "fittest" meme survives (Dawkins 1989: 190f; 2004: 229; 1998: 302). In Dawkins' view, while some human behaviours are

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[77] Although Dawkins was not the first to propose the idea of replicating cultural units, as they had been earlier suggested by Donald T. Campbell, he both developed the idea and established it within the scientific and popular discourse.

directed by the genes, others are explicable only by reference to this memetic process. Dawkins cites specific examples of this as the fashions in modes of dress, architectural styles, ceremonies and religious notions (Dawkins 1989: 190; 2006: 191f). Whilst this theory acknowledges the separation of aspects of human behaviour and culture from the genes, natural selection remains pre-eminent for the mechanism of genetic evolution has simply been replaced by a memetic equivalent. It is an idea that has been taken up by a number of notable persons including the neuroscientist Susan Blackmore, the philosopher Daniel Dennett and writers Robert Boyd, Peter Richerson, Elliot Sober and David Wilson.

The primacy of natural selection in this theory rests heavily upon the extent to which an analogy between genes and memes is feasible. In this view, both genes and memes are construed as replicators which exist simply to make more copies of themselves in their respective environmental and cultural contexts (Dawkins 1998: 304f). The memes, like genes, are seen as having both high copying fidelity ('self-preserving') but also the capacity to mutate and change as they are passed from one individual to another (Dawkins 2006: 305f). Further, whilst their modes of transmission are entirely different, as genes are passed to the next generation by reproduction and cultural ideas by learning and imitation, it is argued that the criterion for their survival is much the same; in both, it will be the ones that are best at replicating themselves that will predominate (Dawkins 1989: 194). So, some memes will survive in the population because, like the genes, they effect benefits to the reproductive success of individuals. In fact, Sober and Wilson presume very heavily upon this linkage of memes to reproductive benefits for their explanation of group 'altruism' in human societies (discussed in Chapter 6). Other memes survive because they generate a positive psychological impact which ensures their own continuance, or because they have a suitability to human memory and processing (Blackmore 1999: 15-16). Some like purely 'selfish' DNA (Section 2.3.4), are said to survive simply because they can, and this is "advantageous" to them (Dawkins 1998: 304; 1989: 200). Others may even survive because they are themselves associated with surviving genes. By and large, however, the fast pace of culture (Blackmore 1999: 78), along with paradoxically its relative inertia in the instances of considerable environmental change (Boyd and Richerson 1985: 171), indicate that most memes are not of this gene-linked nature. In fact, Blackmore says that human behaviours may be clearly "memetically adaptive but biologically maladaptive" (Blackmore 1999: 35) – a scenario that would not have been allowed had the genes been in charge. Dawkins cites examples of this, one of which is the celibacy of religious orders (Dawkins 1989: 198).

Considering the parallels that are drawn between genes and memes, it is perhaps not surprising that the rhetoric of competition and selfishness, which are common in the sociobiological vision of nature (Section 2.2), also characterises memetics. So, just as it is 'selfish' genes which predominate in a population, in culture, selection will be for the memes that "exploit their cultural environment to their own advantage" (Dawkins 1989: 199). Memes, like genes, are 'selfish' and "spread themselves around indiscriminately without regard to whether they are useful, neutral, or positively harmful to us" (Blackmore 1999: 7). Further, as gene variants 'vie' for bodily presence and representation in the gene pool, so memes are said to 'compete' against each other for human brains and culture at large (Dawkins 1998: 307). The human mind is said to be a composite of these "warring" and "infesting" memes (Dawkins 1998: 309; Dennett 1995: 366-367). So, Dennett says "our selves have been created out of the interplay of memes exploiting and redirecting the machinery Mother Nature has given us" (Dennett 1995: 367).

In response, it seems entirely acceptable that there are ideas that encourage reproduction, are psychologically comforting and even those that have a genetic component (such as the importance of caring for offspring; Sections 4.4-4.5). Moreover, ideas are undoubtedly both preserved and changed through the transfer from mind to mind in human discourse and learning. Yet, there are many difficulties with this memetic interpretation of human culture and behaviour, not least of which, is that even if its analogy to genetic evolution holds, the rhetoric of selfishness is not appropriate for genes, and therefore is also presumably misleading when applied to memes. Further, as genes, even purely 'selfish' DNA, effect benefits to the overall survival of individuals, species and ecosystems (points made in Sections 2.3.2 & 2.3.4), then perhaps one should see memes as also accruing some wider benefits. Moreover, if those like Dawkins insist on cultural equivalents to biotic evolution, then it must be recalled from Section 2.2 that the genetic mutation and natural selection process is only one force among many in evolution. If truly analogous to the evolutionary process, then presumably the symbiosis dynamic proposed by Margulis, which has been shown to have introduced the major advances in evolution, would also be a very significant force in cultural evolution. Indeed, many consider that culture appears more lamarckian (than either symbiotic or neo-darwinian) in its transmission of acquired features to the next generation (e.g. Gould 1983: 70-71).

In fact, as Rolston points out, once culture is no longer subject to genetic control, as memetic theory accepts, there is no reason to suppose that a cultural force akin to any evolutionary process must come into play. Cultural ideas may follow the Platonic model, the Hegelian one of thesis, antithesis and synthesis, the oppositional forces of yin and yang in Taoist religion or the Hebrew model of divine impartation to prophets (Rolston 1999: 137-138). Where genes are not involved, genetic mechanisms surely cease to be relevant. Analogies are often useful in science, but as Alister McGrath notes they may sometimes be misleading – he rightly suggests that the parallels between genetic evolution and culture is one such instance of the latter (McGrath 2005: 132-133).

In fact, the most significant difference between genetics and culture is that the latter shows a very high degree of intentionality and purposiveness that is not seen in genetics (McGrath 2005: 126). The somewhat random nature of genetic mutation and selection[78] is very different to the self-reflective processes by which new cultural ideas are formed and old ones revised. Memes, unlike genes which pass from host to host on the grounds of their replicative success, are not contained within such passive vehicles – the brain is able to assess and evaluate the ideas presented to it. The process through which genes are selected is not equivalent to that by which ideas are espoused and passed on to others. In fact, the human capacity for reasoned deliberation and careful judgement is surely the basis of science itself. Indeed, one might wonder how the idea of the mind as 'infested' by 'exploitative' memes correlates with the scientific process. Interestingly, Dennett speaks of there being no “independent” mind to assess memes to determine their relative worth for even such criteria as truthfulness or beauty are themselves memes (Dennett 1995: 364-365). He seemingly sees this as the reason that ethics can never arrive at truth (Dennett 1995: 510). Yet, along with other supporters of memetics, he sees no such problem with regard to the veracity of science and its proposing of evolutionary theory. He posits this on the basis that science, unlike ethics or religion, is informed by the objective scientific method which involves the experimental process.

In response to such a view, it can be pointed out that evolution is a historical science as it describes large scale transitions which occurred in the distant past and which are not directly accessible to repeatable experimentation (Miller & Halloran 1993: 109f; see McGrath 2005: 105-106). The support for evolution instead relies on the criterion of coherence, that is, the theory's ability to make sense of the observed and experimental data that are available. The idea of coherence and its correlation, not with experimental data but with historical events and personal experience, is an important element in both religious and philosophical thought. So, it could be said that

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[78] Although genetic evolution involves some directionality as mutation 'hot spots' indicate (see Section 2.3.2), this is clearly of a different order and type to that of self-conscious beings. Even given the divine supervening of natural history, such that the process is ultimately teleological, the genes themselves are unable to express any intentionality in their own evolution – on their side, there is no reasoning, reflection and decision-making.

the notion that evolutionary theory transcends memetic accounts cannot be maintained without allowing also for the possibility that other areas of knowledge do the same. Of course, given memetic theory, they might also all be dismissed on the grounds that the criterion of coherence is a meme. Indeed, as Alan Costall has argued, the very idea of memetics is inevitably self-defeating as it can always be argued that the very concept of memes is itself a meme (cited in McGrath 2005: 177).

Thus, the attempt to maintain the supervening role of natural selection by bridging the distance between genetic based behaviours and the observed diversity of human culture through memetics is unconvincing. It relies on a parallel between genetic evolution and cultural processes which is questionable at several levels, not least of which is that the ability of the human mind to critically assess and deliberate ideas has no direct equivalent in genetics. Indeed, once aspects of culture and behaviour are acknowledged as independent of the genes, which memetics assumes, then as was mentioned above, there is no reason for them to be subject any longer to its particular type of explanatory form. This point is an important one in the consideration of the matter of human care for others for whilst some sociobiologists constrain human beneficence to kin and reciprocators, others like Elliot Sober and David Wilson, along with Ernst Fehr and his co-workers, make use of memetic theory to explain why humans extend beneficent acts toward group members. This chapter already indicates that their views are not valid given that their premise of memetics is inappropriate.

Interestingly, Dawkins himself concurs with the view that human beneficence is naturally bound to kin, reciprocators and perhaps the group, but advocates acts of beneficence which express care for others beyond these limits. He sees such an expansive form of care as being forged in defiance of both the genes and memes. He says: “We are built as gene machines and cultured as meme machines, but we have the power to turn against our creators. We, alone on earth, can rebel against the tyranny of the selfish replicators”

(Dawkins 1989: 201). George Williams also advocates that humans, despite their inherited natures, should use their cognitive abilities to "now espouse remote and inclusive ideals far removed from the selfishness that gave rise to the power to do so" (Williams 1988: 402).[79] Many have observed that it is not at all clear where Dawkins and Williams garner their basis for such a view, one that evidently transcends both the 'strong' co-evolutionary approach and that of memetics. John Haught notes that such an aspiration is beyond the capacity of any thorough-going naturalism (Haught 2006: 148f). It also has no resonance with Sociobiology itself, and instead it may be that Dawkins and Williams are drawing upon implicit ideas that they have garnered from other ideologies in their prevailing culture – perhaps the Christian ideal of love. Certainly, Dawkins shows no self-consciousness that, considering the memetic theory, the idea that humans should defy nature and act on the grounds of disinterested benevolence (a universal care), and that this is good, must simply be regarded as 'infesting' memes (see Breuer 1982: 263). These ideas should not be credited with more than the fact that they have been able to replicate themselves in seemingly at least two human minds. One might sympathise with Dawkins for wanting to bypass the limits of natural selection and his own memetic theory, and locate an ideal beyond that of the 'selfish' genes and memes, but it cannot be argued for from Dawkins' own perspective for such an ideal must simply be dismissed as yet another meme.[80] So, whilst the correlation of memes with human 'altruism' by Sober and Wilson will be subject to further discussion in Section 6.3, it is suffice to note here that those who adhere to memetic theory can never postulate an ideal of human benevolence (at least, not consistently) that it is beyond memetics for any such ideals must necessarily be seen as just

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[79] Williams sees himself as continuing the tradition of Huxley who saw evolution as counter to the moral sense, but as going further, for recent science has shown, more than Huxley could have ever imagined, a natural world filled with 'violence' and 'competition' stemming from 'short-sighted selfishness' (Williams 1988: 383-399; 1993: 227-228). Williams, like Dawkins, views morality as a defiance of nature.

[80] Indeed, memetics would undermine any ideas of human beneficence that extend it beyond the biological categories in a universal care, for whether they were derived from philosophy, religion or "thin air" (Grant's view of Dawkins' perspective; Grant 2001: 32, 27), they would have to be dismissed as memes. In fact, as this section has shown, there is no sound basis for accepting the memetic selection process, and as such ideas on beneficence cannot be so disregarded.

another 'exploitative' meme.

3.4 Conclusion

The sections above have argued that although human behaviour and culture have a genetic component, genes neither prescribe the entirety of the human individual's behaviour nor that of culture. Natural selection has its efficacy but only to a point, and the memetic theory cannot be employed to take it beyond this boundary. The view postulated by the author of this thesis is instead that of a 'weak' co-evolutionary approach in which some but not all aspects of human nature are the consequence of natural selection. This lays a necessary cornerstone to the critique of the sociobiological view of 'altruism' in the chapters which immediately follow, for as human nature is not entirely subject to natural selection then the expectation must be that human 'altruism', contrary to the sociobiological view, cannot be delimited to adaptive forms. Both human 'altruistic' behaviours and the cultural beliefs that motivate them can go beyond the control of natural selection.

One wonders why it is that sociobiologists are so ardent in their advocating of the supervening role of natural selection in human affairs, given the evidence to the contrary. Undoubtedly, this stems from the vision of sociobiologists to provide a comprehensive account of all of nature, including human nature, and thereby to make even morality entirely accessible to the biological sciences. It must be recalled from Section 1.1 that sociobiologists like E. O. Wilson see themselves as proffering an objective and truthful rendering of not only the natural world but of human society and ethics; one that can supplant older religious and philosophical ideas. Their goal is an ideological one – the presenting of a single, coherent worldview – and as such there is a reluctance to acknowledge when the data do not fit their categories of explanation. The critique in the sections above has indicated that while the co-evolutionary approach can, indeed, be expected to garner important and truthful insights into nature, those involving humankind are necessarily limited. In fact, this will be evident in Chapters 4 and 5 which follow, for the discipline will be shown as informative in its explanation of kin and reciprocal 'altruism' within both nature and human nature. Yet, as the discussion will demonstrate, in humans, the sociobiological approach is only able to account for some aspects of human beneficence in these contexts. Even this limited applicability is not the case for the sociobiological depiction of group 'altruism' within human communities which will be discounted in Chapter 6, largely on the basis of its reliance upon memetics. As was indicated in the Introduction to this thesis, the human capacity for an empathetic regard for the other and the hedonistic drive to attend to the self's needs and wants, will be explored and developed throughout Chapters 4-6, showing their implications for human beneficence. The role of human ideological values in resolving these drives will also be taken up in these chapters.

Chapter 4: Kin 'Altruism', an Overview and Critical Analysis

4.1 Introduction

This chapter begins with an outline of the biological basis for the 'altruistic' care of kin in Section 4.2, and its sociobiological description in terms of 'selfishness'. As this section will show, while this care is described formally as a form of 'altruism' because it involves a phenotypically 'altruistic' act, its sociobiological interpretation is in terms of a fundamental genetic 'selfishness' that in humans leads to the psychologically selfish disposition of an innate human nepotism. Even with regard to the phenotypic 'altruism' that it entails, sociobiologists are keen to stress the limits of this aspect of 'altruism' in accord with what is known as Hamilton's Rule – an effect which also has consequences for the human psyche. On the grounds of this Rule, human nepotism is seen as bounded by the stronger and more persistent disposition of concern for the self's own reproductive interests over and against any care of kin. The various aspects of 'selfishness' that are associated with kin 'altruism' will be considered and critiqued in the sections that follow. In Section 4.3, the sociobiological arguments for genetic 'selfishness' will be assessed and it will be contended that this ascription is misleading for kin 'altruism' is as genetically 'altruistic' as it is 'selfish'. The questions that have recently been raised within Sociobiology on the appropriateness of Hamilton's Rule will also be noted here. In Section 4.4, this research will consider the extent to which kin 'altruism' can be correlated with human behaviour. This section will propose that there are, indeed, genetic factors that facilitate a strong attachment between parents and offspring in humans, and perhaps between siblings. Unlike these nuclear family bonds, however, the genetic factors that lead to preferences for wider kin are substantially weaker in humans, if they exist at all. Thus, reasons are given against the interpretation of kin 'altruism' in terms of an innate human nepotism toward wider kin.

Yet, as both the parent-offspring and possibly sibling relationships have a genetic basis in humans; this raises the issue of the extent to which these particular relationships are subject to sociobiological interpretation and description. Both the parental care of offspring and the relationship between siblings will be examined in Sections 4.5 and 4.6 respectively, with particular reference to the human context. These sections will demonstrate that, despite their categorisation within kin 'altruism', sociobiologists tend to minimise any 'altruism' that is involved in these relationships, and place the emphasis decidedly upon what they see as the genetic, phenotypic and psychological selfishness that characterises even these closest and most genetically based of kinship ties. In response, the discussions will counter the ideas of genetic and phenotypic 'selfishness' in these relationships, and will show their essential role in the sustaining of the species. These sections will also indicate the ways in which humans regularly transcend the psychological selfishness that one would expect from natural selection, both in terms of an egoism that goes beyond this bound and an altruism that does the same. These sections bring to the fore the central features of the human psyche that are involved in these psychological motivations – that of hedonism, self-conscious reasoning and empathy – and will begin to suggest ways in which they may be influenced by cultural beliefs and ideologies.

4.2 Sociobiology and the 'Selfish' Interpretation of Kin 'Altruism'

Of the biological forms of 'altruism', kin 'altruism' was one of the first to be identified and forms a central element in sociobiological discussions on sociality (Barash 1982: 74; Boorman & Levitt 1980: 14). It was Darwin who first noted that in species of the order Hymenoptera (bees, wasps and ants), there were 'workers' and 'soldiers' that were essential for the functioning of the nest but that did not reproduce. This aiding of others seemed contrary to natural selection theory, which stressed individual 'competitiveness' and reproductive fitness. Darwin himself considered that it could be resolved if these 'workers' were contributing to the survival of their kin (Darwin 1950: 169f). John Haldane and Ronald Fisher, a century later, refined this idea of kin preference in accord with modern genetics. They postulated that under natural selection, genetically encoded behaviours have been selected which enable an individual to act 'altruistically' towards those who carry replica copies of the individual's own genes – the genes were facilitating their frequency in the population by supporting the survival of shared/replica genes found in genetic relatives (cited in Wilson 2005b: 159-160; Barash 1982: 74). So, although the individual 'workers' and 'soldiers' were expressing phenotypically 'altruistic' behaviour, in providing for and protecting other adults and in forgoing their own reproductive interests, this was only because by so doing, more of their replica genes could be maintained through their kin. Whilst the action was phenotypically (and reproductively) 'altruistic', it is said to be profoundly and essentially genetically 'selfish'.

During the 1960s, William Hamilton formulated kin 'altruism', or kin selection as it is also known, into a general, mathematical theory based on his study of the Hymenoptera species. He postulated that the genes for 'altruistic' action toward kin could occur only so long as the individual's losses were more than compensated for by the survival of the favoured kin (and their replica genes). Hamilton expressed this relationship in terms of ratios such that the probability of a gene being shared between parents and offspring, or between full-siblings[81], is on average 0.5 (or 50%), while that for half-siblings, nieces, nephews and grandchildren will be 0.25 (25%), and so on (Hamilton 1996: 31-32). Thus, for appropriate compensation, "the benefit to a sib must average at least twice the loss to the individual, the benefit to a half-sib must be at least four times the loss, to a cousin eight times and so on" (Hamilton 1996: 45). In this model, "no one is prepared to sacrifice his life for any single person but that everyone will sacrifice it when he can thereby save more than two brothers, or four half-brothers, or eight first-cousins" (Hamilton 1996: 45). This model clearly brought into kin selection theory another layer of

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[81] Full siblings share the same parents whereas half-siblings have only one biological parent in common.

'selfishness', for not only was kin preference said to be 'selfish' in genetic terms, even the phenotypic 'altruism' that was inhered in it had clearly defined limits – an individual would only assist kin to the extent that it served their genetic interests. If this criterion was not met, then the expectation was that the individual would act in a phenotypically 'selfish' way, promoting its own survival and reproductive interests over and against the care of kin.

One of the early influential works supporting kin theory was Paul Sherman's study of the alarm calls among Belding's ground squirrels. He found that the alarm calls used to warn conspecifics that a predator was in the area were more often given by the females, which tended to live in kinship groups, than by adult males, which, as they were more migratory, were less likely to be related to those in their group (Sherman 1982: 191-195). This preferential bias toward kin is also thought to explain why zebras that live in family units will often defend calves while wildebeest that live in more mixed groups tend not to (Barash 1982: 77). Even among mixed groups like the Japanese monkey *Macaca fuscata*, individuals are more likely to groom and perform other phenotypically 'altruistic' acts for relatives than for non-relatives (Jeffrey Kurland cited in Trivers 1985: 114-116). Another commonly cited instance of kin 'altruism' is the example of 'helpers' in bird species.[82] These 'helpers' are adults that 'cooperate' in the breeding of another pair by feeding their young, mobbing nearby predators and defending the pair's territory. Where the 'helpers' are genetic relatives of at least one of the pair, the explanation given is that of kin selection (e.g. Richardson, Komdeur & Burke 2003: 580). The young adults are 'altruistically' promoting their parent's reproductive success as, by so doing, they are assisting the replica genes shared with their siblings – their phenotypically 'altruistic' actions are based on genetic 'selfishness'.[83]

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[82] 'Helpers' are found among a number of species including Kenyan green hoopes, the African white-fronted bee eaters, pied kingfishers, American scrub jays and red-cockaded woodpeckers (Barber 2004: 30).

[83] Interestingly, not all 'helpers' are necessarily genetically related to the pairs they assist, indicating that, in such instances, their action is not genetically 'selfish'. Nevertheless, sociobiologists contend that such 'helpers' have ultimately 'selfish' motives as they are only assisting these non-kin in order to gain experience in providing for young, or by increasing the territorial area of the pair and so the likelihood that they themselves will be able to secure an ecological niche for nesting (Woolfenden 1981: 258-259; Barash

Kin selection theory has, by and large, continued to garner popularity and its interpretative framework is used as the basis for not only animal social relations but for all forms of biotic life. In fact, David Queller notes the increasing use of bacteria for understanding social processes like kin selection (Queller 2004: 975). As this theory has come to encompass the simplest forms of biological life, it is also used to characterise the most complex, that of human behaviour and culture.

Sociobiologists like Alexander, Trivers and Barash are convinced that kin 'altruism' has given rise to the psychological human disposition to nepotism, a widespread favouring of one's immediate and extended family over that of other individuals; a phenomenon which they say is a natural and prevalent fundamental of all human cultures. So, Alexander says: “At the base of every known human society there is a kinship system in which genetic relationships are an essential ingredient” (Alexander 1980: 144; also Barash 1982: 74). It is a system of genetic 'selfishness' which has generated a psychological selfish bias toward kin, one which directly counters any notions of the human capacity for a disinterested altruism in which there is universal love, fairness and justice for all. Even within the family, there is a differentiation in the expression of 'altruistic' care based on Hamilton's Rule. Parents teach their children the appropriate labels for kin such as aunt, first cousin and sister for this allows them, albeit largely through unconscious processes in the brain, to make the necessary discriminations (Alexander 1980: 108). In general, any sacrificial actions taken will benefit closer kin over more distant ones – for example, siblings over first cousins, the latter over second cousins, grandmothers over great-grandmothers and so on. In addition to this genetic distance, the reproductive potential of the kin may also be factored in as this indicates the likelihood of the shared replica genes being passed to the next generation. So, while an elderly great aunt and a young adult cousin may share the same number of replica genes with an individual, as the cousin has

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1982: 90, 93; Emlen 1981: 217). Their seeming phenotypic and genetic 'altruism' toward non-relatives is simply a 'selfish' means of improving their own individual reproductive fitness.

greater reproductive potential, the bias will be toward the cousin (see Dawkins 1989: 95f). Even between siblings, whilst an individual will have some interest in the well-being of a sibling (on account of the 50% shared genes), as was mentioned above, this will not exceed the interest in her/himself to whom she/he is 100% genetically related unless Hamilton's ratios are satisfied.[84] This attention to the degree of genetic relatedness and reproductive potential in kin 'altruism' is also seen in the parental care of offspring which has its interests not in the young per se, but in providing for as many offspring as possible and supporting them only to the extent that they are likely to survive and thereby, go on to reproduce.[85]

So, whilst there is an extensive system of nepotistic kin preference, sociobiologists are clear that this care of kin does not take the form of a psychological altruism, where the welfare of the other is an ultimate concern, as the human psyche is orientated toward valuations based on the degree of genetic sharedness and potential reproductive success. Alexander expresses this view: "Moral philosophers have not treated the beneficence of humans as a part, somehow, of their selfishness; yet... the biologist's view... leads directly to this argument" for parental care and wider nepotisms are mechanisms which simply result in "greater [genetic] returns than their alternatives" and only "evolutionary mistakes or accidents" will result in genuine altruism (Alexander 1987: 88). So, in kin selection: phenotypic 'altruism' is graded; psychological altruism is accidental or nonexistent; psychological selfishness is expected; and above all, genetic 'selfishness' is ultimate. In response, it must be said that the biological rationale behind the emergence of kin 'altruistic' behaviour is certainly plausible and it is

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[84] An essential aspect of Hamilton's Rule is its negative corollary – the less genetically related an individual is to the actor, the more likely that it will be subject to 'spite' (e.g. Gardner & West 2004: 1413).

[85] Some sociobiologists consider the parent-offspring relationship is not an example of kin 'altruism' on the basis that the provision for offspring is the promoting of one's own reproductive success and not the survival and reproduction of relatives (Boorman & Levitt 1980: 13). Dawkins, among others, sees it as another form of facilitating replica genes as in the 'altruistic' actions toward the offspring, the parent is simply acting to protect and support another individual that carries its gene copies (Dawkins 1989: 93-94). Dawkins' view best fits with the sociobiological description of kin 'altruism'.

seemingly supported by many observed examples. The matter at hand is whether this kin selection deserves the 'selfish' attributions that are given to it by sociobiologists, and the extent to which it is representative of human affairs. These subjects are taken up in the sections that now follow.

4.3 A Critique of Kin 'Altruism' as Genetic 'Selfishness' and a Discussion of Hamilton's Rule

The premise of kin 'altruism' in Sociobiology is that although it involves phenotypic forms of costly behaviour, it is robustly genetically 'selfish'. The individual 'altruist' is simply supporting the replica genes that are present in the bodies of genetic relatives. Yet, in any promoting of the survival of kin, an individual is necessarily propagating the non-shared as well as shared genes. When a parent supports the life of an offspring, it is promoting the genes that it shares with the progeny as well as the half-set that has been derived from its mate. As was pointed out in Chapter 2, the process of sexual reproduction and the innate barriers to incestuous mating mean that an offspring will carry only about half of the genes of the parent as they are combined with an entirely new set of genes from the half-set committed by its mate. Of course, care for even more distant kin will involve supporting still more unrelated genes. Further, having supported these kin, whether offspring or more distal relatives, these relatives will then go on to outbreed and produce progeny that are even less genetically related to the 'altruist'. Therefore, if kin 'altruism' is genetically 'selfish', it is equally and perhaps even more genetically 'altruistic' due to outbreeding.[86] In fact, within a population, kin is an incredibly mobile and shifting quantity as distinctive genetic lineages and genotypes are constantly being merged and interlinked through sexual mating – any supporting of kin involves the perpetuation of these diverse lineages.

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[86] Even if one takes the perspective of the particular genes that promote kin 'altruism', the situation is still not self-evidently 'selfish'. Although it could be argued that a gene which encourages kin 'altruistic' behaviours is, at the very least, 'selfishly' promoting its own survival – this gene would have to be 'selfish' in spite of the fact that it produces a phenotypically 'altruistic' behaviour which leads to the promoting of new genetic sets with every generation (genetic 'altruism').

Nonetheless, sociobiologists have attempted to retain an emphasis on genetic 'selfishness' by arguing that although most species, including humans, favour non-kin in mating, they still tend to pair with those that are most like themselves – a phenomenon called assortative mating (Wilson 2000: 80). They show a preference for the non-kin who carry the same genes. Yet, even in such cases, the assortative preference is seen as only involving a similarity between some genes, it is limited to a select number of genes.[87] One of the ways in which animals may be able to make this identification of genetic similarity is by smell. In an interesting review article, for example, it was noted that women show a preference for men who have a similar odour to their father (Motluk 2002a: 13). As the genes affecting odour are closely linked to those for the major histocompatability complex, which forms part of the immune system, it suggests that women choose men who have this system in common. It was pointed out, however, that in this example, the favouring was a preference based on a sense of 'homeyness' and not as the basis for the choosing of a sexual partner. Indeed, the evidence points toward women preferring a different smell in their selected mate – a phenomenon that is widely recognised among other species like mice (Motluk 2002a: 13). In humans, as in other species, there are mechanisms that promote non-assortative mating. In fact, the overall conclusion from quantitative studies of human mate selection is that it is not of the assortative type.[88] Therefore, if assortative mating does occur, and this

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[87] Dawkins has argued for the "green beard" effect in which a 'selfish' gene acts to secure matings with individuals that carry its replica even though all the other genes in this individual may differ (Dawkins 1989: 89; 1982: 144-149); it is genetically 'selfish' but only for the single gene involved. If this occurs, however, it must operate alongside mechanisms that simultaneously prevent incestuous associations – the preference is for replica genes in non-kin over replicas among kin. The ultimate effect is that the population members of closest genetic similarity, kin, are actively deselected in favour of a preference for those non-kin with overall genetic dissimilarity.

[88] In humans, the only strongly correlated characteristic in mate selection is intelligence – others like the physical traits of height and weight show a relatively low correlation and that for personality is even lower (Plomin *et al* 2001: 170). Even with regard to IQ, this preference may simply be due to the fact that people with similar levels of cognitive ability are more likely to meet one another as they frequent the same workplaces and educational facilities. There are also many reasons for desiring an equivalent IQ in a partner, such as similar interests and mutual understanding, which need not be related to kin selection and the preference for replica genes.

example and other evidence suggest the converse, it is restricted to relatively few traits (and their genes).

Another suggestion given by sociobiologists in support of the 'selfish' view is that whilst sexual mates are chosen from among non-kin, each mate will try to secure the well-being of the 50% of the offspring's genome that it has contributed *at the expense of the other mate*. Each parent will try to 'manipulate' the other (that after all, is not genetic kin) to invest as much as possible.[89] Indeed, there may well be adaptations under natural selection that cause each sex to contribute the least energetic investment possible for successful reproduction – but is this necessarily a form of 'selfishness'? Surely, it can also be viewed as a dynamic process that tends to make reproduction both efficient and effective. It is an unconscious 'negotiating' where, if the labour load for one partner becomes too much, such that reproductivity begins to fail, then natural selection will favour a 'renegotiating'. Moreover, the parental investment in progeny is directed at the phenotypic level toward the same aim, namely the survival and thriving of the offspring – a parental bird cannot feed only its 50% of the genotype in its progeny. This requires a considerable degree of 'cooperation' between the parental mates. It is arguably this high degree of 'cooperation' which is required for the care of offspring that has led to the genetic factors which underlay the strong mutual bonds which form between human mates, among which are the occurrence of a romantic phase, the capacity for ongoing sexual pleasure,

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[89] In 1948, John Angus Bateman suggested that females in all species will tend to be 'coy', seeking as much material benefit from the courtship and post-fertilisation male 'fidelity', while males tend to feign 'fidelity' but are 'promiscuous'. There is an insidious 'manipulation' by both sexes. Current research has since led to a revision of Bateman's sexual stereotypes as the females of many species, from whales to rodents, are also 'promiscuous' (reviewed by Knight 2002: 254-256). In some cases where the female is more 'promiscuous', it is because the roles are reversed – the male is the primary carer and the females aggressively 'compete' for male access. This does not hold for all as female langurs may have a number of male partners although they remain the primary carer (Knight 2002: 255). It should be noted that some times, female 'promiscuity' seems to be advantageous as the resulting mixed litters tend to be larger and more viable – this is seen in pseudoscorpions, prairie dogs, adders, and sand lizards (Zeh & Zeh 2006: 201-203; Knight 2002: 255-256). The system is more complex than a straightforward 'manipulation' with many factors being involved. The deficiencies of Bateman's approach in providing a comprehensive explanation of human mate behaviour are indicated in Appendix 3.

and not least, empathetic care (Fessler & Haley 2003: 10ff).[90]

It is perhaps in light of the extensive 'cooperation' between mates at the phenotypic level, that sociobiologists have tried to locate the 'conflict' of interests at the genomic level. The suggestion is that genomic imprinting provides a means by which one sex can cause the other to invest more. One cited example is the *Mest* gene in mice where only the paternal copy is expressed in progeny (the maternal copy although present is 'silenced' by imprinting). It was found that this paternal gene promotes embryonic growth – an occurrence that was deemed to support the idea that the father is 'coercing' the mother to invest as much as possible in the offspring (Lefebvre, Viville, Barton, Ishino, Keverne & Surani 1998: 163-169). Scott Forbes argues that this is also the reason that paternal genes are involved in the construction of the placenta – the male genes are again 'coercing' the female into nurturing (Forbes 2005: 63). Firstly, however, it should be noted that much still remains to be known about the extent and the mechanisms of imprinting. Secondly, it is interesting to note that the *Mest* gene also seems to be responsible for maternal behaviours such that the disruption of this paternally expressed gene results in female mice being significantly less attentive to caring for and feeding pups (Lefebvre *et al* 1998: 166). This means that the paternal gene is responsible for generating daughters that invest highly in their young. So, whilst the father is trying to induce the mother (that is not kin) to invest more by promoting embryo growth, he is also inducing his daughters (his kin) to subsequently become high carers which, due to outbreeding, will be of *an unrelated male's genes also*. This transgenerational view shows how very complex the matter is and that neat divisions into parental biases and 'manipulations' are too simplistic.

It is, of course, because kin selection is always necessarily directed toward genetically unrelated others, excepting the case of identical twins, that Hamilton suggested his ratios as these limit phenotypic 'altruism' to those

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[90] Discussed further in Appendix 3.

most closely related and make preferential treatment proportional to relatedness. Yet, E. O. Wilson who strongly supported kin 'altruism' in his renowned work *Sociobiology* (e.g. Wilson 2000: 117-119), has recently spoken out against it in a paper entitled “Kin selection as the key to altruism: its rise and fall” which was published in 2005 in a journal issue specifically concerned with errors in science. It is not that Wilson rejects the genetic evidence for the nuclear relationship of the parent-offspring; his repudiation is rather of Hamilton's Rule, which Wilson contends is no longer acceptable (Wilson 2005b). Hamilton's ratios had been drawn from the early studies of haplodiploid social insects in which females are diploid (carry two copies of every chromosome and its genes) and males are haploid (carrying only one). This situation meant that full sisters were closer genetic relations to one another (by 75%) than they were to mothers or daughters (with which they share only 50% replica genes on average). Therefore, observations suggested that sterile female 'workers' could more effectively replicate their genes into the next generation by 'sacrificing' their own lives and reproduction in 'caring' for sisters rather than daughters. From this came Hamilton's terms for 'altruism'/'sacrifice' based on the shared percentage of genes.

According to Wilson, there are several problems with Hamilton's Rule, including the fact that sisters must raise not only other sisters but brothers also – the latter of which they share replica genes of only up to 50%. Thus, the energetic demand upon 'workers' exceeds the resulting gains of genetic 'self-interest' (Wilson 2005b: 161-162). Moreover, this social structure of 'sacrificial workers' is not just found in haplodiploid insect species but among full diploid ones as well, and in at least one species of rodent (Wilson 2005b: 162-163). In these cases, the ‘workers’ are far from compensated by the shared genes. In addition, in multiple insect queen colonies, and those founded by unrelated females[91], 'workers' show no preference for their own

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[91] Female 'workers' sometimes replace the reproductive female in their own nest as well as other nests (West-Eberhard 1981: 4-6; Nanork, Paar, Chapman, Wongsiri & Oldroyd 2005: 829).

mother over non-relatives (Wilson 2005b: 163). Further, although some species exhibit aggression and 'policing' which distinguish between kin and non-kin, this is not true for all (Wilson 2005b: 164). Wilson concludes that group selection provides a better explanation of such behaviours than kin 'altruism'. This is an interesting insight and although it is impossible to conclude that kin 'altruism' is not an important function in nature, it suggests that Hamilton's ratios, which undergird much of the talk about the limits to phenotypic 'altruism' and genetic pay-offs, should be treated with some reserve. In fact, as Section 4.6 will argue, in the example given for the support of Hamilton's Rule in sibling relationships in birds, the process seems to be remarkably good for the species. So, even if Hamilton's theory is accepted, it has benefits far beyond the alleged genetic 'selfishness'. Indeed, as this section has just contended, the many arguments for genetic 'selfishness' as forming the basis for kin 'altruism' are not convincing, for any favouring of kin necessarily involves the promoting of unrelated genes; a genetic 'altruism' that is not self-evidently undermined by references to the assortative process or genomic imprinting. The interpretation of kin 'altruism' as grounded in genetic 'selfishness' is a misnomer.

4.4 A Critique of Kin 'Altruism' as a Pervasive Human Nepotism

The extent to which kin preference is an innate feature of human nature depends, of course, upon whether it is genetically determined or a matter of cultural and/or personal values, which are not derived from the genes. Studies have indicated that there are, in fact, very strong genetic components that facilitate the parent-offspring bond, and possibly sibling relationships – relations that together constitute the nuclear family. Research has shown that particularly in the parent-offspring relationship many of the cues, such as the mechanisms involved in recognition, are biologically based.[92] The mother-

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[92] It should be noted that recognition is not a requirement for all cases of kin preference as the example of Belding's squirrels shows – here kin 'altruism' occurred through the unconscious process of increased alarm calls from females. Given human intelligence, however, it is likely that recognition is an important element.

baby recognition process involves odour, auditory and visual elements such as early facial memorisation.[93] This bonding is further supported by a host of additional genetic elements.[94] It is because of this biological basis, of course, that parental care is not just a human, conscious phenomenon but is widespread among animal species and especially where the young are born in a dependent and helpless state, its expression clearly involves very powerful instinctive behaviours. One need only think of the fierce and risky behaviour of parent animals in protecting their young. Among human siblings, as with other animal species, it is thought that the very close proximity/familiarity during early development may well precipitate gene-based responses, one of the most pronounced of which is the innate aversion to incestuous relations (the matter of sibling care and/or rivalry must await discussion in Section 4.6).[95] This would explain why, when unrelated young children are raised within the same home, even though they are consciously aware of not being genetic kin, they still exhibit a strong reluctance to marry each other.[96] The idea that natural selection has led to the selection of genes that promote the parent-offspring bond and impede sibling incest is clear; in fact, without these propensities the human species would not have survived. Young children would have succumbed to death

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[93] Among mammals, including non-human primates, the young are often identified by their cry or smell (Walters 1987: 374-380). Even ants possess a sensillum region on their antennae that can distinguish between nestmates and non-nestmates (Ozaki, Wada-Katsumata, Fujikawa, Iwasaki, Yokohari, Satoji, Nisimura & Yamaoka 2005: 311-314). In a range of animals visual cues are also important, whether this is facial memorisation in mammals or the remembering of simpler cues such as nest position among birds (Barash 1982: 83). Whilst these auditory and smell cues are present in humans, this is to a lesser degree, and here visual cues seem to predominate. This can be seen in early facial memorisation in which parent and infant will gaze at each other's faces; a memorisation process that is reinforced by the facial cues being associated with pleasant feelings, for example, parents will tickle their babies while placing their face near to the infant's (Alexander 1980: 110-111).

[94] The mother-offspring bond in mammals is particularly complex and involves a plethora of factors including a range of hormones (estradiol, progesterone, prolactin, placental lactogen to name a few), neuropeptides like oxytocin and beta-endorphin and genes like that for *Mest* and *FosB* (Bridges 1998: 108). In prairie voles, at least, the paternal bond seems to be mediated by the neurotransmitter vasopressin (Konner 2004: 705).

[95] The proximity during development is an important factor in sibling recognition in other primates (Walters 1987: 374-380). Interestingly, rats and mice can distinguish siblings from non-siblings even when reared separately (Robinson & Smotherman 1991: 310-319).

[96] Alexander cites the tendency of children living together in kibbutz not to marry, and the failure of arranged marriages in Taiwan where the children were raised in the same home (Alexander 1980: 79, 196-197)

because of parental neglect and siblings would have mated to produce unhealthy, sickly progeny. Those relations which constitute the nuclear family have a genetic basis and for reasons, not of genetic 'selfishness' (the converse in the case of sibling aversion to incest; see Section 2.3.3), but for the viability of the species.

What then, does one make of the instances of wider kin favouritism in human history? There may well be a biological basis to such phenomena; however, if it is present, it is relatively weak for one need only consider the very rapid demise of the extended family in Western societies.[97] The preferences for cousins, aunts and so on has not proved to be so genetically entrenched that it cannot be overridden by the effects of increased mobility. In response, it has been argued by sociobiologists that this is because the genetic factors which favour wider kin are not specific, for in past societies, those who were often in one's immediate surrounding would have frequently been kin, so the genes had only to establish a preference for those who were familiar (e.g. Dawkins 2006: 221). Yet, these points surely support the view that the correlation of the preference of wider kin to genetics is weak, if only because natural selection had no reason to strengthen it. In fact, it would seem that humans most probably lived then and now in mixed groups of kin and non-kin. This would have been a necessity to avoid inbreeding. Therefore, if familiarity alone led to preference, in fact, its scope was always wider than genetic relatives even in the prehistoric communities. Nevertheless, it is often pointed out that the practice of labelling kin allowed those in such mixed groups to differentiate kin from non-kin (e.g. Alexander 1980: 107). Yet, as Alexander also rightly notes, in humans, the recognition of wider kin comes mainly through the process of learning about the nature of these relationships from parents (Alexander 1980: 108; also Wells 1987: 405). It is not instinctive, as children need to be instructed in these relationships, a point that indicates its cultural rather than genetic basis.

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[97] Even in some indigenous communities, the recognised family is only the nuclear one of parent and offspring.

Indeed, the kin labelling system beyond the nuclear family may be founded simply on a connection to a referential figure within the nuclear family.[98] So, an aunt is important to the niece not because of genetic factors favouring aunts but because there is a recognition that the aunt is emotionally bonded (of attachment value) to the niece's parent to whom the aunt is the sibling. The child's bond to the aunt simply reflects the child's observation that her parent has an attachment to this person.[99] This might explain why the further the relationship is from its connection to the immediate family, the less the strength of bonding. It would also account for the rapid displacement of the extended family by nuclear units in Western societies, as these wider kin attachments, along with the labelling of kin, are not themselves genetically predetermined but simply established around primary nuclear biological ties that are.

So, whereas in the sociobiological view, natural selection has led to genetic factors that distinguish various degrees of relatedness for phenotypic 'altruistic' action, it is argued here that genes have been selected for forming the bonds within the nuclear family, but not necessarily the relationships with wider kin. Indeed, the latter are so substantially weaker that their primary mediator has to be oral learning. Further, the argument put forward here is that these wider kinship ties are based on relationships around referential figures in the nuclear family; they are non-genetic relationships that have come out of genetically binding ones. This is not to exclude outright the possibility that there is some biological mechanism that encourages wider kin preference in humans, but only to say that it is, at the most, a biologically very weak force; one that requires socialisation, the exposure to relatives and learnt reinforcement of their importance (or not, as the case may be), for its

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[98] There is some evidence that other primates seem to recognise each other as kin based on the relationships to referential individuals like the mother (Walters 1987: 374-380).

[99] One might even plausibly argue that this process of wider kin recognition is primarily concerned, not with kin preference, but with tracking relatedness in order to prevent incestuous matings. Children are made familiar with relatives at an early age so that, as occurs naturally with siblings, there is a rejection of them as potential mates later in life.

expression. Therefore, while the nuclear family is a biological necessity, the nepotistic favouring of wider kin that comes out of Hamilton's Rule is not. There is a bias to caring for one's offspring but there is no necessity for the human psyche and culture to be structured by wider nepotisms. Moreover, as the next section will argue, it is, in part, because of the innate bias to care for one's offspring that, through natural selection, the human abilities for empathy and self-conscious reasoning have evolved. Whilst these facilitate the parent-offspring bond, they also open up the capacity for humans to express a quality of care that transcends the limits of natural selection.

4.5 The Parent-Offspring Relationship: Grounds for Psychological Altruism or Sociobiological Intergenerational 'War'

As the parent relationship to progeny is one of the most profound forms of kin 'altruism', and because it has a genetic basis in humans as in other species, it will be given further consideration here. One might expect, given the definition of kin 'altruism' as a form of phenotypic 'altruism', which as Section 4.3 has shown is not genetically 'selfish', that the appropriate descriptor of this relationship would be that of 'altruism'. This is not so, for sociobiologists argue that the parent-offspring relationship in all animals, humans included, is one of ongoing, mutual "war" and "manipulation" (Trivers 1985: 153; Dawkins 1989: 123f). Beneath any ascription of 'altruism', is said to lay a phenotypic and genetic 'contest' between the parent and its progeny. It is argued that whilst parents try to minimise their investment in each offspring, so that they can produce a maximal total number of viable progeny (and thereby, replica genes), each of the young attempts to secure maximum investiture in its own being and particular gene set (Dawkins 1989: 124f).[100]

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[100] An often cited example of this is Triver's suggestion of a weaning 'conflict' in which the mother of many animals, from cats and dogs to humans, will initially seek out the young for feeding but in later periods will gradually begin to reject their advances for feeding and 'coerce' them into independence (Trivers 1985: 153; 2002a: 137). Trivers considered that this constituted a 'war', with parents forcing young into independence so that the parents were free to mate and produce further offspring (Trivers 1985: 153; also 2002b: 67f). In his view, the progeny, on the other hand, will try to remain reliant for as long as possible using tactics like wagging, smiling (human infants) and even 'tantrums' (pelicans, chimps and humans) as a means of forcing their parents to continue to feed

These respective drives, the parental one to produce a maximum number of healthy young and the offspring's own attempts to secure its well-being, are certainly entirely in keeping with natural selection. Nevertheless, it is questionable whether this relationship is rightly described in the 'hostile', 'manipulative' way that is attributed to it by sociobiologists. There is no reason that it cannot be depicted as an unconscious dynamism between parental investment and progeny demands. In fact, it should be noted that the parental care must remain above a certain threshold value for the progeny to survive, and that there is a threshold above which progeny demands (and parental care) are counter effective – being an overfed, overweight youngster is not a selective advantage in nature. There are limits within which both agree and any 'conflict' is for levels outside of these threshold values. Therefore, much like the example of mate investiture in Section 4.3, the system is one of responsiveness and efficiency where there is, over time, an unconscious 'negotiating' over levels within these thresholds. The reasons why this dynamism cannot be directly applied to human relations will be discussed later on in this section. It is suffice to note here that, for other species, it provides an effective means of sustaining wider benefits; for the consequence of producing both the most possible young and ones that are able to survive is surely the sustaining of populations and species.

Moreover, this dynamism should not obfuscate the very demanding nature of producing and caring for offspring – a point discussed at length in Section 2.3.1. Reproduction is a phenotypically 'sacrificial' act and it is, surely, because the process is so exacting that strong genetic mechanisms have been selected in order to keep it in existence. In all sentient creatures, there are instinctive and learnt preferences for behaviours that generate pleasure,

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them, even when they are replete (Trivers 1985: 155; 2002a: 141f). Observations have suggested, however, that it is often in the young's best interest that they move from milk dependence to adult sources of food (cited in Mock & Parker 1997: 198; Barash 1982: 332-4).

such as satisfying thirst and avoiding pain and danger; these are referred to as the hedonistic or self-preserving drives and are absolutely necessary for survival. Yet, for reproduction to be successful, natural selection has also had to ensure that significant amounts of labour, pain and risk are endured by parents in the acts of producing, feeding and protecting their offspring. Consider the example of the risk behaviour by a mother animal in protecting her offspring – under selection pressure, genes have been selected that promote self-preservation in the parent including behaviours such as avoiding predators (as by so doing, the mother lives longer). Yet, when a predator is in the presence of the mother's young, the self-preserving influence must be overridden *to some degree* by risk behaviour (or else, her young would always succumb). Whilst the self-preservation instinct is good, for without it individuals (and thereby species would fail), it has to be compromised in the care of progeny for it is only through 'sacrificial' parental care that offspring survive, and thereby that the species is sustained.[101] It should be noted that the parental animal will not normally give up its life for an individual offspring or even a whole brood, rather 'sacrifice' here refers to the total amount of risk and labour that is sustained by the parent in producing its maximal number of viable young. (Although Hamilton used the term 'sacrifice' in his rules, as sociobiologists are aware, this seldom literally happens in nature.)

The issue of parental care becomes particularly acute with humans who have

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[101] It is interesting to note Marlene Zuk's comment in *Nature* on the reception of the film *The March of the Penguins*. According to Zuk, the father's fasting from food for months in the freezing cold while protecting its egg, and the long and extremely arduous distances trekked by both parents to feed the young once it had hatched, are simply them acting as "perfect little darwinians, as selfish as can be" (Zuk 2006: 917). She ignores the phenotypically 'sacrificial' element in their parenthood and dismisses as "religious" the view that it is good for the species. What, however, could the alternative be to this tight parent-offspring association for sustaining the species? Presumably if the penguins fed only the first youngster they came to then there may be chaos, with the feeding of any one individual being 'hit and miss'. The better alternative is that the penguins survey the entire group of young and establish which of the young is in most need – a feat of rationality well outside their ability (as well as being time wasting). The point is that the parental bond to its own offspring is, by and large, the best way to secure the welfare of the most young. It is both 'sacrificial' and very good for the species.

the capacity to reason – as Ayala noted this is an important tool in human survival as it leads to the consequent human ability to evaluate their own behaviours and their outcomes (Ayala 1995: 118-121). Yet, this ability means that human parents can weigh up the great demand of childbearing and care, and assess whether it is in their phenotypic interests – a feature that is probably unique to humankind. The answer is overwhelmingly that it is not, for the mother who claims that the care of her children is a costly act, in its forgoing of her own wants and needs for basics such as sleep, is not to be dismissed. Her care is deeply and fully demanding with regard to her own body. Nonetheless, humans have managed to sustain their species, one might even say too well. The answer to how this has been so is probably multifold – there is clearly an innate emotional desire to have progeny within the human psyche and the pleasure associated with sex is also surely an important factor.

Yet, while these features lead to reproduction, the generating of progeny, they do not necessarily facilitate the care of such offspring. Here, the empathetic process is particularly important, for it allows humans to vicariously experience the emotions and needs of their offspring. Without this empathy, the reasoning capacity alone would probably have led to human offspring being neglected. In fact, it may be true to say that natural selection could not have effected the emergence of intelligence without that of empathy. [102] This is not to say that empathy is simply a counter to intelligence in the care of offspring as they may also co-act toward this end. The high-level consciousness and reasoning abilities of humans, which makes them aware of their costly actions in parental care, are also essential in the expression of empathy as it enables the parents to form appropriate responses to the empathetic impulse – to decide on the right course of action

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[102] The biological basis of empathy is a point taken up by Plutchik (1987: 38ff), Katz (1963: 63), Hurlbut (2002: 314f), and noted by others like Haarsma (2004: 155). Notably there are seemingly those for whom mental impairment impedes the development of empathy – this includes psychotics (Katz 1963: 58) and those with severe autism and/or profound learning disabilities.

in solutions to their children's expressed needs.[103] So, whilst reasoning alone would not have upheld the human care for progeny (and perhaps would have effected the converse), in its combination with the psychological capacity of empathy, these innate abilities have generated a powerful means of parental care. This is especially critical for human offspring who are born in a helpless state and require parental attentiveness for a very prolonged period. Indeed, it is reasonable to suggest that selection has generated an empathetic instinct that is particularly sensitive to the cues of dependency and helplessness that are exhibited by infants and young children. This phenomenon probably underlies the human empathic response to similar cues of weakness in others, including adults. Humans have an innate empathetic responsiveness to those in need.[104]

The precursors of the empathetic process have been observed by Frans de Waal and his colleagues in primate groups like that of the chimpanzee (de Waal 1996: 82f; Flack & de Waal 2000: 3; also Plutchik 1987: 38-46). It is not just important in parental care but in forming the wider social bonds such as the reciprocal relations between primates within a troupe – a fact that is true for humans also (discussed in Chapter 5).[105] Yet, while observations indicate that primates have some capacity to respond to the emotional and sensate state of the other (whether pain, fear or distress), the empathetic nature is evidently much more developed in humankind. As was mentioned above, humans have a high-level consciousness and reasoning capacity – these enable individuals to take on the mindset of a distressed other, not just

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[103] It is the reasoning and empathetic capacities within humans that have led to the teaching-learning process in which cultural ideas and tool making are passed down, by parents (and others), to the next generation in order to aid their survival.

[104] This point is referred to in Section 10.2 (footnote 284) in the context of the Christian love for the weak.

[105] One example of empathy in chimpanzees is their comforting of those distressed in the troupe by touching and embracing (Flack & de Waal 2000: 18; 2005: 81f). Interestingly, this latter behaviour is only seen in the great apes and not in other primates like macaques suggesting that it needs a higher level of cognitive understanding (de Waal 2001: 325-327; Flack & de Waal 2000: 18). It should be noted that although Sagan suggests that these empathetic behaviours are learnt adjustments to consequences such as punishments (Sagan 2000: 47), the fact that they occur spontaneously in situations to which the chimps have not been previously exposed, mitigates against this (see de Waal 1996: 52-53).

respond to immediate signs of distress, but to engage fully with the other's anguish (or joy) including those formed around future possibilities and imagined outcomes. This facilitates a much more developed empathy, one that takes into consideration the emotional, mental and intentional states of others – their feelings, purposes and goals. Such a full empathy depends heavily upon the imaginative process through which identification is made with the other person – this recognition of some form of similarity is necessary for the empathiser to adopt the other's position (Katz 1963: 32f).[106] The cognitive abilities of imagination and abstraction not only intensify the empathetic sense, but also lead to another important aspect in human care, one which is well expressed by Edith Wyschogrod as the experience of the other as a subjective being (Wyschogrod 2002: 34). As Wyschogrod notes, in interactions between persons there is recognition that the other is a subject, capable of desires, intentions and suffering (Wyschogrod 2002: 34). Stephen Post refers to this as the awareness "of the other as other" (Post 2002: 54). This has allowed humans to appreciate their children (and others) as subjective persons, as individuals having a unique emotional and cognitive life, and possessing particular goals and aspirations.

It is because of the human capacities for the empathetic and the subjective awareness of their children, that a crude application of the parent-offspring dynamism in investiture to human relations is misplaced. Consider the outcome of reproduction that one expects from natural selection – it would be a human drive, like all other species, *to generate the most possible, viable young*. Human behaviour, in terms of natural selection, should not attend to each progeny as if having individual worth but be concerned with maximal numbers of healthy offspring. This is not what is regularly observed as humans tend to treat their children as individuals and not in relation to a desired total.[107] Moreover, with regard to the criterion of viability, whilst some

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[106] The importance of this identification with others for empathy to develop is taken up in Section 10.3 in the context of the NT requirement to love one's enemies.

[107] It could be argued that what appears as individual care of progeny is just an increased investiture in each child to enhance the child's viability – it is natural selection effecting quality rather than quantity of children as the best means of gene replication. This may

parents reject their disabled children, others exhibit a parental care that is even more intense and protective than the responses seen toward healthy offspring. [108] Humans often, one might even say commonly, exceed the limits that are expected from natural selection and kin theory. Where a child is treated as a subject of concern in her/himself, this is surely what is commonly understood as psychological altruism – that other-centred care which seeks the well-being of the individual as an end in itself, even at cost to the altruist.[109] This is the reason that whereas the parent animal 'sacrifices' itself in the sense of total self-giving in reproduction, human parents have the capacity to literally give up their lives for an individual child, and have done so on occasions. Thus, the phenotypic 'altruism' of parenthood has been noted, the matter of genetic 'selfishness' has been disputed and the genetic 'altruism' highlighted (Section 4.3), and now it is argued that humans, through the empathetic and cognitive processes, also show the propensity for a psychological altruism in the care of their children. The latter means, of course, that even in this most genetically based of human relationships, and in part because of it, humans show the ability to go beyond the bounds of natural selection and the psychologically selfish limits of kin 'altruism'.

The sociobiological view of such instances of psychological altruism, wherein parents sacrifice their lives for a child or care for a disabled one, is necessarily that they are contrary to natural selection and as such must be seen as evolutionary "mistakes" – exaggerations of the innate drive for maximal number of viable young (see Alexander 1987: 88).[110] Yet, such an interpretation surely depends upon the view that Sociobiology provides a

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be so, however, natural selection still requires that such investment is maintained relative to a maximal number of young, at limited cost to parents, and certainly is not directed at inviable young.

[108] Indeed, even chimpanzee troupe members have been observed treating disabled young and ill members with additional tolerance and protection (de Waal 1996: 49-52, 57). The treatment of disabled human children is discussed in Appendix 2.

[109] Stephen Pope also recognises the psychological altruism in human parental care (see Section 7.3.1).

[110] Although Sober and Wilson argue the case for a possible evolved psychological altruism in the care of progeny (Sober & Wilson 1998: 303f), they do not take into consideration the natural selection limit upon such care, namely, that it must be directed toward a maximal, viable young.

determinative framework for human behaviour and that all examples to the contrary are 'accidents' or 'misfirings' (e.g. Dawkins 2006: 221). The point of the preceding chapter was to show that while Sociobiology provides insights into human natural propensities, humans can transcend these (as this example demonstrates) and that the matter of whether they should or should not do so is a subject for ideological decision-making, the invoking of cultural beliefs which themselves may be independent of the genes. Indeed, one might compare the sociobiological view of such instances as exaggerations with the alternative postulate that a personal Deity has allowed the strong empathetic nature to form within humankind for the very purpose that it should give humans the capacity for psychological altruism, the concern for another individual for her/his own sake.

By and large, sociobiological writings contain few references to empathy and in some key texts like Triver's *Social Evolution* it is entirely absent from the index. Others, like E. O. Wilson, mention it briefly and whilst acknowledging its flexibility, consider that it is ultimately constrained by natural selection to sociobiologically prescribed limits (Wilson 2001: 148) – a view to which this chapter is clearly a counter argument. There are others within Sociobiology who contend that the empathetic sense is simply another form of those self-preserving tendencies of so-called hedonism – it is ultimately a self-directed device, albeit through the other-directed proximal care of another. We assist others so that we can feel good or can achieve some final pleasurable goal (that warm glow on helping) or simply to avoid the negative feelings like guilt. This view is expressed by Matt Ridley in *The Origins of Virtue* as "the more you truly feel for people in distress, the more selfish you are being in alleviating that distress" (Ridley 1996: 21).[111] If this were so, then contrary to the view posited here of its potential for psychological altruism, empathy would simply have to be regarded as another form of self-directed hedonism.

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[111] Sober and Wilson are more equivocal arguing that other-centred empathy may be possible, although they consider that an explanation entirely in terms of hedonism is more likely (Sober & Wilson 1998: 272).

This question of the directedness of empathy has been addressed primarily through the extensive experimental studies done by Daniel Batson and his group. The results of Batson's work have consistently supported the idea that empathy is an other-centred response and not hedonistic self-concern (Batson 1991: 116ff; 2000: 207-210).[112] Batson has shown that people who experience a high degree of empathy for a needy individual are much more likely to help the person than those who feel a low empathy (Batson 1991: 116-123).[113] Moreover, this helping by high empathy individuals was shown not to be influenced by whether the participant could easily leave the presence of the needy person (so avoiding the unpleasant experience), nor by other ultimately self-directed concerns such as social reprisal (reputation loss)[114], personal punishment[115], personal reward[116] or even the experience of shared joy at the person's relief[117]. Yet, limits to this care were also observed

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[112] It should be noted that physiological differences can be observed between persons who are affected by hedonistic concerns and those who are experiencing other-centred empathy and sympathy. In the former, the person shows an increased heart rate, particular facial expressions and degrees of skin conductance. This is unlike the empathetic response where, because attention is directed to the needy other, there is a somatic 'quietening' in the observer – a reduced heart rate, accompanied by very different facial expressions and skin conductivity.

[113] High empathy was induced by a number of means, one of which was to ask the participants, when they read an account of the needy other, to either use their imagination and take the perspective of the needy person, or to focus their attention only on the information given in the account, such as the person's movements or on the techniques used in communication (Batson 1991: 119-120, 132). The former arouses empathetic feelings while the latter reduces them.

[114] The helping by high empathy individuals, unlike low empathy ones, was not affected by whether or not they were led to believe that significant others would know if they had helped or not– they were evidently not driven by a fear of social disapproval (Batson 1991: 131-134).

[115] In order to see whether the helping was driven by self-punishment (a concern of feeling bad and guilty at having not helped) some of the participants were told that others had helped (a guilt inducement to helping), while others were told that they had not (guilt alleviating). The results showed that high empathy help was not significantly affected by these conditions; a result that was confirmed by further tests (Batson 1991: 140-141). Batson concluded that: “Having looked hard in a number of places to find empirical support for an empathy-specific punishment explanation of the empathy-helping relationship, we have found none” (Batson 1991: 148).

[116] It was possible that the helping by high empathy individuals was driven by the rewards associated with the helping behaviour, and in order to test this, Batson divided participants between those who were permitted to help the needy other and those who were not. These groups were further subdivided into those who were told that the need had been alleviated and those who were not given this information (Batson 1991: 149ff). The self-centred reward hypothesis predicts that the individuals would feel a mood enhancement only when they were able to help, whilst if empathy is other-centred then a mood-lifting will occur when the need had been alleviated whether or not they were the ones who helped. The results were again consistent with empathy as other-centred.

[117] Where joy is the primary desire, the motivation would be self-directed as it would not be

in Baton's experiments, for in a study where the cost of empathetic care was high, most but not all participants became more concerned about their own well-being than that of the needy other.[118] These experiments demonstrated that, contrary to the sociobiological view of those like Ridley, the evidence is that empathy is other-centred and that it may compete with the self-preservation/hedonistic drive. Hedonism does not define empathy but may act in opposition to it.

The hedonistic drive is as important as empathy both in terms of understanding the human psyche and in highlighting ways in which humans transcend the bounds of natural selection, even within parental care. Thus far, this section has perhaps given a rather optimistic view of parenthood for whilst humans show a capacity for the individual and intense attachment to each child, a psychological altruism, there is also a natural instinct for self-preservation/hedonism. It is not that the latter is a negative quality in itself, it is absolutely essential for survival, but that it may at times compete with other-centred empathy. In fact, an observation of modern humanity shows that this instinct for pleasure and avoidance of pain can become the basis of a self-indulgent lifestyle, one in which even that most strongly based of

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driven by the need of the other but by a desire for feelings of joy (Batson 1991: 154). In order to test this, Batson and his colleagues divided high and low empathy subjects between those who were given no information about the subsequent condition of the needy person, and those who were told that they would know of the person's condition if they choose to help (Batson 1991: 158-161). With other individuals, the probability of the feedback being favourable was varied (Batson 1991: 161-163). The empathy-joy hypothesis predicts low helping of both high and low empathetic individuals when there is no feedback, and a linear increase with the increasing probability of there being good news. In contrast, empathy-altruism predicts that high empathetic individuals will not be affected by feedback or by the probability of the feedback being good news. The empathy-altruism hypothesis was again supported by the results.

[118] The one instance where the behaviour was *not consistent* with empathy-altruism was in an experiment where the participants were told that the electric shocks being administered to the person were not mild and uncomfortable but painful (Batson 1991: 124-126). The result was a behaviour pattern consistent with hedonistic aversion-arousal – most (but not all) became more concerned for their own well-being when the cost became too high. Although this shows that empathy is, as Batson's says, “a fragile flower, easily crushed” (Batson 1991: 125), it indicates that participants had been motivated by empathy-altruism in prior experiments. It also shows that in order for empathy-altruism to be expressed in instances where there is high cost to the actor, natural inclinations are not always sufficient. Sadly, no information was recorded about the cultural beliefs and values of those who continued to express the empathy-altruism even at significant cost.

genetic drives, such as reproduction and the care of children, can be overridden.[119] As Alexander himself notes, some in modern human society, and possibly ancient ones as well, have chosen novelty seeking over the costly business of reproduction (Alexander 1987: 38; 1985: 6). There is, of course, the natural pleasures of parent-offspring intimacy and seeing one's children grow,[120] but this can be weighed against a lifestyle that is self-focused and entirely pleasure-seeking. Where hedonistic self-gratification is sought over reproduction as an end in itself, humans have again transcended natural selection limits, this time not toward a more intensive care mediated by empathy but in its opposite direction, toward a self-centredness.

Thus, whereas in all other species the hedonistic instinct is overcome in the genetic-based drive to reproduce, such that despite the risk and arduous nature of this task reproduction is maintained, in humans, these natural constraints are not necessarily observed. So, for example, substances known to the human users to be detrimental to lifespan and reproductivity, whether excess food, drugs or alcohol, may be consumed. Thus, whilst there are processes that innately drive humans toward the expansive care of others, there is a potential for hedonism to also exceed the boundaries of natural selection in an inordinate orientation toward the immediate pleasurable state of the self, toward egoism. Boehm is partly right when he says that human nature contains "contradictory dispositions" (Boehm 2000: 212). Yet, the full truth is even more complex for consider a being with an empathetic impulse but no hedonistic drive, such an individual will tend to neglect its own well-being and may benefit others at needless expense to itself (situations where mutual aid would have sufficed). It would lead to a self-annihilating kind of sacrificial care. The point is that while empathy and hedonism are fundamentally orientated in different directions, toward others and the self respectively, other-centred altruism requires hedonism if it is not to become

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[119] There may be other possible causes for an avoidance of reproduction such as economic constraints, personal trauma, disability and so on.

[120] This is not to ignore the fact that women in some cultures are coerced into this role and that men may sometimes impregnate a female but offer no care for the child.

entirely life-defeating (the role of self-care in the altruism of the NT is discussed in Section 8.3).

Added to this undoubtedly complex human psyche is the human capacity for choice – for whilst the female bird instinctively becomes preoccupied with the care of progeny, humans in the parental context and in all relationships, face choices between the various drives (egoism, altruism or reproduction) on a regular and even mundane basis. The particular choices that humans make between these possibilities depend, at least in part, upon one's experiences, such as the observed choices of others and the felt strength of each respective drive. Yet, an important element is also the cultural and personal beliefs that are held regarding what should be done. It is at this level that the process becomes an ideological issue as the decision-making invokes values and goals in order to resolve which of these motivations should take precedence. There is no reason to consider that Sociobiology, and consequently the outcomes of natural selection, is the appropriate source for this cultural decision-making. The preceding chapter has argued that Sociobiology should not be seen as the only or even preferred worldview. Indeed, as the example of parenthood has shown, humans have the capacity for psychological altruism and for egoism, both of which outreach the natural selection limits. As such, the matter is evidently beyond the categories of this paradigm. All that the discipline can perhaps say is that both the psychologically altruistic care of progeny and the egoism that avoids reproduction (or by indulgences like over-eating leads to reduced reproductive fitness) are evolutionary 'mishaps' – with perhaps a leaning toward the idea that both excesses should be avoided. As humans have some freedom in their cultural beliefs, there is certainly no reason that this conception should be chosen over another, for instance, one that endorses human reproduction but also requires a psychological altruism to be expressed toward kin and all others (the NT ideals demonstrated in Chapters 8-10).

In summary, this section has argued that the sociobiological construal of parent-offspring relations as an intragenerational 'war' is misplaced, not least because of the very phenotypically 'altruistic' character of parental care in both humans and wider nature. Moreover, in humans, the innate capacity of empathy that is involved in this care may take the form of a psychological altruism that treats the progeny as ends in themselves. Yet, the possibility of egoism, that seeking after pleasure as an ultimate goal even at the expense of reproduction and the care of progeny, also inheres in humans. These various potentials are resolved in humans, to some extent, through the decisions made on the basis of their held ideologies or worldviews. These psychological propensities and the role of ideology are further explored in Appendix 2 with regard to the issue of infanticide and its sociobiological description. In Appendix 3, there is a brief reflection upon these potentials in the context of the relationship between human sexual mates. Both of these appendices show that the sociobiological description of these phenomena in terms of selfishness is far too limited, as again humans exhibit the capacity for both altruism and egoism.

4.6 Sibling Relationships: Grounds for Psychological Altruism or Sociobiological Intragenerational 'War'

The premise of sibling relationships in kin theory is that, in accord with Hamilton's Rule, whilst individuals will have some interest in the well-being of a sibling, this will not exceed their 'self-interest' as they only share 50% identity with the sibling but are 100% genetically related to themselves. Whether or not one should accept this Rule, Scott Forbes and Douglas Mock certainly have, and they have recently written extensively on the matter of sibling relationships from their observations of bird behaviour. These works focus on the limits of sibling 'altruism' and place the emphasis upon 'rivalries'. This attention to sibling 'competition' is certainly not new although earlier sociobiological writings tended to stress the 'altruistic' actions toward siblings and the constraints on 'rivalry' (e.g. Barash 1982: 334-335).[121] In contrast,

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[121] Attention was given, for example, to the way in which full-siblings could expect more

Mock and Forbes are at pains to point out the 'nasty' nature of sibling relationships, and their writings are replete with terms denoting incredible 'cruelty' and 'violence'. Any phenotypic 'altruism' between siblings is seen as minimal compared to the endemic phenotypic 'selfishness', a characteristic from which emerges rivalrous human sibships.

According to these writers, the most common example of this struggle between siblings is the apparent 'competition' between progeny for parentally provided food – their 'competitive' begging (Mock & Parker 1997: 52; Forbes 2005: 198). Another example comes from the common practice, amongst the young of many species, to 'cooperate' by huddling together to conserve warmth. In species like the yellow-headed blackbird, the stronger (called "core") chicks in a brood will often take the warmest site in the nest, leaving the weaker, marginal chicks to be more exposed (Forbes 2005: 21-22). This inequality in the relationships between the brood can also become deadly as in some species, the marginal young are killed by the core offspring. In some cases, the parents will also apparently bias the 'competition' between the offspring – the example cited is the red-wing blackbird which may supply testosterone to its larger core chicks making them more demanding at feeding time, although in some situations, these birds may also supply the marginal young preferentially with the steroids (Forbes 2005: 17). Forbes' own conclusion is that:

> Greed is not only good... but is sometimes mandatory for a proper functioning of family relations. A nestling bird that does not beg as hard as its brothers and sisters will not get fed. Genes for self-restraint lose the evolutionary game, and unilateral disarmament can be even worse. (Forbes 2005: 199)

These works, in keeping with the sociobiological approach, are written with

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'altruistic' regard than half-siblings (Boorman & Levitt 1980: 167f). Dawkins was perhaps more overt in the idea of sibling 'competition' in his depiction of the 'expendable' runt (Dawkins 1989: 125, see also 128-130).

human social relationships very much in mind. Therefore, they speak of there being a similarly vicious struggle that takes place between human offspring. Forbes not only locates this in the sibling rivalry seen in the demand for the parents' attention over and against siblings, but also argues for examples of innate human siblingcide. According to Forbes, twins must 'compete' within the womb for space and with monochorionic twins, who share a single foetal sac, this 'rivalry' can become deadly. He suggests that twin transfusion syndrome, where the blood flow of the twins becomes unequal, resulting in one twin lagging behind in growth and potentially detrimental effects on the other, is such an example of the deadly 'competition' between siblings (Forbes 2005: 140-142). In Mock's preface to his own work, he recounts his experience as the youngest son bullied by his older brothers as an example of innate human sibling rivalry. Whilst his parents wanted to induce phenotypic 'altruistic' action between the siblings (as they were coequally 50% related to each child), the siblings themselves naturally resisted this, as it was not in their genetic interests to the same degree that it was in the parents' interests (see also Trivers 2002a: 143-144; 1985: 162-163).

Nevertheless, it may be that Mock and Forbes have overstated the 'rivalrous' nature of sibship in the natural world. It should be noted that there is an apparent 'honesty' in 'begging' for food and warmth among animals such that the demands tend to reflect accurately the degree of need. Forbes himself cites an innovative experiment by Robert Evans which showed that parent birds and young 'agree' on the temperature for egg incubation – chicks in their eggs will cheep, a signal for parent birds to warm them, only when they are below a threshold temperature (Evans cited in Forbes 2005: 162-163). This may be explained either by the energetic demand of 'begging' being such that there is threshold over which the added warmth does not compensate or because it incurs disadvantages such as attracting predators and/or excessive warmth. This 'honesty' also appears to occur in feeding for the same reasons; as was mentioned previously, it is hard to imagine any selection advantages being associated with a grossly overweight chick. It seems that these often quoted examples of sibling 'rivalry' are more properly simply the offspring, individually, communicating their needs to parents. Thus, it is doubtful whether 'greed' is an essence in nature as Forbes suggests.

Further, Forbes and Mock themselves recognise that the selection pressure that generates acts of direct 'conflict' between siblings, shifting it sometimes from a previously 'harmonious' relationship, is for the most part that of food scarcity (Forbes 2005: 198; Mock 2004: 7). While food is plentiful, both core and marginal young will normally have sufficient food and warmth to survive, even if biases are present, and no 'conflict' will occur. Parents, however, will tend to be 'optimistic', that is, to produce more progeny that can necessarily be supported, and so when ecological conditions deteriorate, the marginal young may well be subject to attacks from core offspring. Although not only facultative siblingcide (when the core offspring only kill younger siblings under ecological pressure) but also obligate siblingcide occurs in some bird species, the nature of the latter is also instructive. The parents in such species produce two eggs and when the second egg hatches, this younger sibling is usually pecked to death by the older within its first few days of life. The interpretation given to this phenomenon is that the second egg is an “insurance policy” that, should anything go wrong with the first egg, the second may hatch successfully (Forbes 2005: 10-11; Mock & Parker 1997: 87). This interpretation is supported by the fact that in experiments where researchers protected the chicks from one another, the parents became exhausted by having to supply food for both young. Although Forbes and Mock construe siblingcide only in terms of genetic 'selfishness', the system, albeit through suffering, is surely beneficial for the species as the effect of sibling 'conflict' is that each parental coupling produces the most progeny possible. This is an important observation for it shows that even when Hamilton's Rule is applied, it seemingly effects wider species benefits.[122] It

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[122] Consider, for example, what would happen if a mutant arose in a facultative species that made the offspring obligate – the carriers of this gene would reduce the overall reproductive output of their parents (by unnecessarily killing siblings), and consequently

should also be noted that even if the chick's dispatching of its sibling is described as phenotypically and genetically 'selfish', this young bird will grow up to be a parent wherein it will expend its energies and time in the phenotypically and genetically 'altruistic' care of offspring.

Moreover, there is no doubt that human sibling rivalry does occur (e.g. Gen. 37: 1-8), and this is probably, in part, innate as human infants are born in a very dependent state, needing constant attention from their parents. Nevertheless, the move from observations of birds to interpretations of human sibling behaviour is not as easy as Mock and Forbes assume. They omit to consider that the processes that mediate sibling relationships in birds and those in humans are vastly different. Human reason, the empathetic sense, culture, personal experience – all of these influence the way a child sees her/his sibling. In fact, even from the standpoint of natural selection, it is far from self-evident that human siblings are 'programmed' to be rivalrous. Consider the observation that the empathetic sense develops early in human life, probably from two years onwards (Barber 2004: 203), in the light of the fact that empathy in parental care is a necessity for reproductive success. As such, it could be argued that humans who are most effective in their care of offspring by virtue of having a strong sense of empathy will, in many cases, have developed this capacity early on in their own lives. So, if reproductive success is the key, as sociobiologists believe, it could be postulated that those who are most successful will be the ones that exhibited and practised empathetic care toward their family members including their siblings in their childhood.[123] As sociobiologists Sober and Wilson themselves have noted: "This suggests that when selection favoured parents who took care of their children, it thereby favoured children who provided help to others" (Sober & Wilson 1998: 304). This counters the idea that sibling rivalry in humans is an

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the gene would most probably become extinct. The same would happen if a gene preventing siblingcide arose in the obligate species where parents can only support one young at a time.

[123] In fact, given that human siblings often share common experiences in the home, it is not surprising that studies have shown that high empathy is seen in these sibling relationships (Thompson 1987: 134).

entirely necessary and fundamental selective advantage; for even if one takes the sociobiological view that natural selection is paramount, then evidently selection will be disposed toward both sibling empathy and rivalry. The point is surely that the matter is complex and that there are inherent natural processes that are directed toward self-preservation which may provoke rivalry, and there are also innate capacities that can mitigate against it.

Another biologically based factor that influences human sibling behaviour is the parents themselves who are thought to be instrumental in the development of empathy in their young. The degree of empathy exhibited by the parent in the family context determines to some extent the empathetic response of the child towards her/his siblings (Hoffman 2000: 142; Kalliopuska 1992: 76-77; Thompson 1987: 132; Feshbach 1987: 275). So, Mirja Kalliopuska says: "The parent's empathy level is of great importance for the development of the child's empathy. The parents clearly serve as an empathy model" (Kalliopuska 1992: 76-77). The basis of this is the human inherent capacity to imitate others, a propensity which is especially pronounced in the child who naturally seeks to imitate the parent (Hoffman 2000: 37-39; Katz 1963: 69; also Heim 2004: 256f). Thus, the greater the parental expression of empathy, the more this will be reflected in sibling relationships through imitation. The implications of parental example are, however, not limited to the family for the parents' empathetic response "both in theory and in practice" toward other people (those outside of the family) is also critical in determining the extent to which their children will do the same (Kalliopuska 1992: 78). As Nigel Barber says:

> Children are impressed by the personal sacrifices that their parents are willing to make, for example, such as donating to charity or supporting a political cause... Many developmental psychologists believe that parent-child relationships lay the template for all future social relationships, including their degree of altruism. (Barber 2004: 127)

Whilst parents have a particularly formative role, it would seem that teachers and other important community figures also have an effect on the development of altruism (Barber 2004: 114f). It should be noted that although children are particularly receptive to the development of empathy-altruism through role models, it is also possible for this to occur in adults (e.g. Kalliopuska 1992: 54-55).[124] In conclusion, whilst sibling 'rivalry' (and 'cooperation') occurs in nature, it evidently has species benefits – and on biological grounds alone, it is not a necessity in human sibling relationships where empathy and parental role models are also seen as important.

4.7 Conclusion

Kin selection theory is one of the fundamental elements of sociobiological descriptions of animal and human 'altruism'. Its sociobiological characterisation is of a phenotypic 'altruism' that is genetically 'selfish' and which, in humans, produces a nepotistic favouring of kin. Whilst one might interpret this phenomenon as possessing some positive attributes, such as phenotypic 'altruism' and the human psychological tendency to care (at least for relatives), this would not be in keeping with the full sociobiological description. Within phenotypic 'altruism' is a graded system that bases any 'altruistic' acts upon the degree of relatedness (genetic sharedness). The most notable example of this is the phenotypic 'altruism' of parent animals, which is not directed toward the care of each of its progeny in themselves, but toward producing a maximal number of viable offspring. Within kin theory, human psychological care for relatives is similarly subject to genetic valuation, and as a consequence, psychological altruism cannot ever be expected. So, not only do humans tend to be nepotistic, this kind of care is never without genetic qualification and indeed, is always subject to an abiding concern for the self's own reproductive interests. Thus, even within

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[124] This biologically based tendency for humans to imitate family and community figures is taken up in Section 9.2 where it is considered in the light of the NT call on believers, as the family of God, to pattern their lives after Christ (the head of the church) and God the Father in a deeply altruistic care of others. Patricia Williams also recognises the role of imitative models in the NT teachings (see Section 7.3.2).

its categorisation as a form of 'altruism', many layers of 'selfishness' are depicted.

Whilst this chapter concurs that kin 'altruism' may well be an important feature of animal and human sociality, the sociobiological interpretation of it in terms of 'selfishness' has been contested on various grounds. It was argued that its description as genetic 'selfishness' is inappropriate as any care of kin necessarily involves promoting non-shared as well as shared genes. Therefore, if it is genetically 'selfish', it is also genetically 'altruistic'; an argument that is not allayed by references to assortative mating and genomic imprinting. Moreover, the idea that the phenotypic 'altruism' of kin selection is graded should not obviate the very demanding nature of these relationships. In the case of the care of progeny in animals, whilst parental investment is in the most possible healthy offspring, due note should be given to the effort and risk involved in this parental care. The care of kin, whether offspring or others, is decidedly phenotypically 'altruistic' even if this care is graded. The sociobiological 'selfish' description should also not obscure the benefits that such kin relationships accrue to the species. Indeed, even in the example of sibling 'rivalry' and siblingcide among birds (a negative form of the phenotypic grading), such wider species benefits were effected. Thus, any selfish rhetoric in kin 'altruism' must be bounded both by the many forms of 'altruism' that are observed in these relationships and the way in which they mediate the sustaining of the species. One might say that if humans were constrained only to the drive for reproductive-replicative success, then as the example of kin 'altruism' shows, humans should be seen as motivated toward expending themselves in the process of sustaining their kind – the sociobiological description of this motivation as selfishness is patently inappropriate. This, however, is not what it is observed for, as this chapter has begun to show, through the very process of kin 'altruism', the human nature that has emerged is much more complex.

It was contended that although the parent-offspring relationship, and possibly sibling relations, are biologically based in humans, wider kin relations are not. Nepotism beyond the care of one's nuclear family is not the human fate. Further, this biologically predetermined unit of the immediate family, with its bias toward caring for one's offspring/sibling, is not just the site for favouritism (and its said corollary of rivalry), it is also the place where empathy-altruism has developed. It is the powerful force of empathy and the sense of other humans as subjective beings that has allowed human parents to express an interest in their children beyond the natural selection categories of maximal and viable young, and to care for them rather as individuals. With these capacities has come the ability for genuine psychological altruism. Thus, kin 'altruism' in the natural world is 'other-directed' as it sustains the collective of the species; and in humans, it has the potential to become other-centred in the capacity to attend to others as individuals. As later chapters will show, this altruistic concern is not restricted to kin but can also be expressed toward non-relatives (Chapter 5-6), and even beyond the species boundary in a care for non-human others (noted in Section 5.4). Yet, within the human psyche is the equally innate feature of hedonism, which is necessary for survival but which can, like empathy, become unfettered. There is within humans the possibility of pursuing the pleasurable states, mediated by hedonistic tendencies, at the expense of reproduction and at cost to others. This psychological egoism is oppositional to the empathy-driven psychological altruism. As this chapter has begun to indicate, choices can be made which orientate the individual toward one or other of these motivations. These choices are made, in part, upon the cultural beliefs and ideological commitments that human individuals hold to.

Chapter 5: Reciprocal 'Altruism', an Overview and Critical Analysis

5.1 Introduction

The sociobiological description of reciprocal relations in the natural world is presented in Section 5.2, along with the implications that are drawn for human relationships. The instances of reciprocal relations cited indicate that the sociobiological delineation of reciprocity in nature is surely right. It is a natural phenomenon in a diverse range of species, including the primates, and can be explained through the mechanism of natural selection acting upon the genes. The matter is whether the sociobiological depiction of reciprocity as a means of exchange that is ultimately phenotypically and genetically 'selfish' is acceptable, and whether it is irrevocably skewed toward 'cheating' and 'deception' as sociobiologists suggest. These issues will be assessed in Section 5.3 which will draw attention to, in contrast to the sociobiological view, the elements of genetic and phenotypic 'altruism' that are inhered in reciprocity, and the reasons for seeing 'honesty' rather than 'cheating' as being the most prevalent form in nature.

In Section 5.4, this research will critically examine the sociobiological view that human relationships with non-relatives are inevitably reciprocal – that humans are motivated by returned benefits with non-kin – and that they are innately bound to cheating, deceiving and self-deceiving to this end. In response, it will be argued that although humans undoubtedly engage in reciprocal relationships and have the capacity to cheat and deceive, there are also other-centred capacities like empathy within the human psyche that cause them to attend to the needs of others. The latter promotes fair and just reciprocal cooperation over cheating, and can lead to genuinely charitable acts where others benefit at cost to the self. Indeed, it will be contended that humans tend to see the reciprocal standard as appropriate only in economic contexts where there is the exchange of goods, and not in personal relationships that directly involve individuals. The expectation is that the latter will involve a psychological altruism where there is a genuine concern for others. So, rather than the sociobiological view, humans are not bound to reciprocity in their relationships with non-kin, nor is cheating an inevitability. In Section 5.5, this thesis will briefly explore the idea that game theory supports reciprocation as a comprehensive description of human relations with non-relatives. In contrast, it will be pointed out that actual game events have indicated that while humans do behave in a reciprocal manner in these games, human behaviour can and does extend beyond the bounds expected by reciprocity even in the monetary/economic contexts that characterise game events.

5.2 Sociobiology and the 'Selfish' Interpretation of Reciprocal 'Altruism'

The observation that unrelated members of a species may ‘cooperate’ to achieve a mutual end has been well-known since the nineteenth century and was written about by those like Herbert Spencer and Peter Kropotkin (cited in Boorman & Levitt 1980: 15). It was not, however, until the work of Robert Trivers in the 1970-80s that in its formulation as reciprocal 'altruism', it became established as a key biological concept. Trivers described this reciprocation as “the trading of altruistic acts in which the benefit is larger than cost so that over a period of time both enjoy a net gain” (Trivers 1985: 391). More specifically, the benefit must outweigh any phenotypic cost so that the act makes an overall contribution to the individual's *reproductive fitness* (Trivers 1985: 391; Barash 1982: 115; Alexander 1985: 12-13). The consequence of the phenotypic gain, such as an increased food supply due to shared foraging, is the resulting investment of this energy into reproduction – only by so doing can the reciprocal behaviour become established by natural selection. In effect, reciprocation can be seen as a reproduction strategy generated by selection forces to increase the individual's number of progeny (or that of kin), albeit through 'cooperation' with other individuals.

Indeed, it most often occurs where there is a strong requirement for 'cooperation', such that obtaining sufficient food and/or predator defence are difficult without it.[125] In the sociobiological view, as such reciprocal ventures ultimately benefit reproduction, and thereby replicative fitness, they are most aptly described as genetically 'selfish'.

In reciprocal relations where there may be some possible delay in the return benefit, the criteria is usually that the partners have a sufficiently long lifespan and low dispersal rate such that interaction between the partners in the future is very probable (Trivers 1985: 362). One of the commonly cited examples of reciprocation in early sociobiological literature is the vampire bats who will feed, by regurgitation, other members of its group that were not able to obtain food. Studies show that the bats will often feed roost mates, which because of their proximity, are more likely to reciprocate in the future (Trivers 1985: 364-365). Interestingly, they will also preferentially feed those that are most hungry – Trivers suggests that this reflects a bias toward helping those to whom the benefit will also be greatest (Trivers 1985: 366). Another example is the behaviour of baboons who will 'solicit' others for help, either in 'fights' or to gain access to an oestrus female, by constant head turning between the object (opponent or female) and the one being 'solicited' (Packer 1982: 205-207). Adult males are more likely to be 'solicited' in such reciprocal alliances than juveniles and females as the latter are lower in the hierarchy and so poorer reciprocators (Packer 1982: 206-207; Trivers 1985: 372-373). Reciprocal relations have also been observed between members of different species such as the cleaner fish like Wasse that remove parasites and dead or damaged tissue, upon which they feed, from the mouths of larger ones like the Grouper (Trivers 2002c: 25-26; Bshary & Noë 2003: 168-

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[125] In some cases, the relationship may be obligate, such that one partner cannot exist without the 'cooperative' action of the other. Examples include: the fungi and algae that exist symbiotically as lichens; the ant-acacia trees in which the trees house the ants in return for protection; and the fig wasp and fig tree where the wasp is an obligate feeder on its flowers and in return acts as its sole pollinator (Axelrod & Hamilton 2001: 143). However, where this interdependence is obligate such that there is no scope for 'cheating', sociobiologists do not usually consider it as a form of reciprocation (Barash 1982: 119; Trivers 2002c: 24f).

184).[126]

Reciprocity is thought by de Waal to form the basis of much of the chimpanzee's social life. In key aspects such as grooming and food sharing, chimps seem to be able to gauge how much another has given in the past and to reciprocate accordingly (de Waal 2001: 350).[127] Moreover, they exhibit aggressive displays, akin to moralistic anger, toward any who refuse to share in return. This, no doubt, sustains reciprocity by tempering any tendency to withhold food and may account for the observation that, in chimpanzee groups, there is often a near equal distribution of food (de Waal 1996: 135-136).[128] As de Waal notes: “All parties stand to gain in such an economy of exchange” (de Waal 2001: 318). In addition, close reciprocal relationships may also form between specific members, often those who are peers of similar rank, to mutual advantage (de Waal 1996: 26-27). Reciprocation also includes the formation of coalitions, primarily between males as they 'vie' for dominance, and the exacting of 'revenge' from members for previous acts of aggression (de Waal 1996: 154-158; 2001: 350). This is countered to some degree by 'peace making' in which former aggressors may kiss and embrace – a reconciliation which may involve a mediating third individual and ensures the restoration of more positive forms of reciprocation (de Waal 1996: 180f). This wide range of reciprocal relations among these primates is thought to account for the fundamental aspects of chimpanzee society, its hierarchical structure and its group unity.

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[126] Another example is the 'rescue' behaviour exhibited between dolphins and whales, both of which will frequently position themselves between a member of either species and an attacker (Trivers 1985: 383-386). They will also aid a sick or distressed member by pressing upwards from below so that the individual is kept at the surface. They will continue to do this, leaving the member only to surface themselves for breath, until the distressed animal either dies or recovers (Trivers 1985: 383-386). Trivers suggests that this occurs because these animals often travel together and can establish a reciprocal relationship. Another example of cross species reciprocity is the ants who protect and feed aphids, and in turn feed on their faecal secretions.

[127] The exchange in reciprocation need not be of the same kind so while chimp subordinates may groom dominants, their return benefit may be protection (Trivers 1985: 362).

[128] This sharing outside of the mother-offspring relationship is not seen in other primates except capuchins (de Waal 1996: 144).

It was Richard Alexander who added to the strategy of reciprocation, where goods or services are directly exchanged, that of indirect reciprocity, in which a third party, an audience, is present who can facilitate an individual's future gains (Alexander 1985: 11). This "third party altruism", as it is also called (Nowak & Sigmund 2005: 1291), employs the strategy of 'reputation building' where an individual participates in a 'cooperative' act in order that others present will, in the future, 'cooperate' with the individual. More importantly, the individual may even contribute, at *a relatively small phenotypic cost,* to a 'needy' other without expected return as long as an audience is present, so that these others will both be inclined to give to and/or engage in reciprocity with the 'altruist' (Alexander 1987: 97-100). In these circumstances, the reproductive-replicative fitness gains are furthered through establishing the reputation as a good 'cooperator' and as an 'altruist'. The phenotypic costs are surpassed by its benefits, this time through the long-term gains mediated through 'reputation'. Clearly, as this type of relationship assumes an ability to know the participants, establish a 'reputation' and evaluatively judge relationships, it is found only among the most social and cognitively able species (Barash 1982: 116; Dawkins 1989: 183) – primarily, if not exclusively, in humans. It is the forms of direct and indirect reciprocal relationships that those like Alexander and Trivers see as comprehensive explanations of all human 'altruistic' giving to non-relatives (see also Dawkins 2006: 216-218). Hence, Alexander says: "It is a common error to suppose that something additional to nepotism and reciprocity is required to account for the structure of society" (Alexander 1987: 53). So, for example, the man who saves a drowning non-relative will generally only do so if the chance of his own drowning is significantly less than the benefits that ensue either through direct reciprocation from the saved person or by reputation gains (Trivers 2002c: 19), or by contributing to a society in which his own children may one day need to be saved (Ruse 2002: 157-158).[129]

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[129] In the same way, acts of bravery during World War I are deemed to have been, not for love of God or country, but for reciprocating comrades (Trivers 1985: 362-363; Ruse 2002: 161).

The sociobiological characterisation of reciprocation is that it is fundamentally genetically 'selfish', as it is directed toward reproductive-replicative fitness. Although it benefits another in phenotypic 'altruism', it is also seen as phenotypically 'selfish' as there are net gains to the individual. In fact, as Judith Bronstein notes, even the effect of the phenotypic benefits to another has increasingly begun to be revised in favour of an emphasis on the 'exploitative' tactics used in such reciprocal relationships in nature (Bronstein 2003: 185-186). The premise for this 'exploitation' is that as costs must be less than benefits, there is an innate tendency for individuals to 'cheat', that is, to try to access the net gain of a reciprocal relationship whilst either reducing its contribution or giving none at all. One example given is the cleaner fish that sometimes 'cheat' by biting off live tissue from client fish as this is more nutritious than the parasites (Bshary 2001). There are also fish who 'mimic' the appearance of cleaners and use the opportunity to consistently remove bits of the host's flesh rather than its parasites – they are obligate 'cheats' which get a nutritious meal at the expense of the host without doing any 'work' at all (Trivers 2002c: 26). The sociobiological view is that there is an innate 'deceitfulness' within the natural world and that this is an entirely natural and necessary characteristic of human existence.

In summation, reciprocal relations in nature are characterised by sociobiologists in terms of genetic and phenotypic 'selfishness' and the tendency for 'cheating'. With regard to human nature, any acts of human benevolence toward non-relatives are seen as necessarily delimited. Firstly, because such acts are comprehensively described by direct and indirect reciprocity in which the motivation is for returned benefits. Secondly, because there is an innate bias in the human psyche away from even the limited 'altruism' of mutuality and fairness in reciprocal exchanges, and toward cheating and deception in favour of one's own interests. Thirdly, because these relationships are ultimately psychologically selfish as they are driven by the desire for the individual's own reproductive-replicative fitness.

5.3 A Critique of 'Selfish' Explanations of Reciprocal 'Altruism'

The section above has indicated that the basis for interpreting reciprocal relationships, whether in nature or human society, as inherently 'selfish', stems from the sociobiological rationale that the phenotypic benefits gained are 'selfishly' invested into the making of progeny and more specifically, the replication of genes. Contrary to this view, it has already been argued that sexual reproduction, that ultimate outcome of reciprocation, is far from inherently genetically 'selfish' as, in this process, genes are 'altruistically' divided up and combined with new sets of genes. Moreover, reproduction involves the phenotypically demanding and 'altruistic' behaviour of parents in their producing and caring for offspring. These are points that have been made in some depth in earlier sections and the details will not be reiterated here (see Sections 2.3.1 and 4.5). It is suffice to note that when reciprocation is viewed as an individual reproduction strategy, the phenotypic 'selfishness' in the reciprocal relationship is ultimately directed at the phenotypically 'altruistic' investment in, and care of, offspring; an act that is as genetically 'altruistic' as it is 'selfish'. Therefore, if reciprocation is understood as a reproduction strategy, then this necessitates its expression also in terms of 'altruism'.

When reciprocity is considered with respect to the relations between the partners themselves, again, the sociobiological depiction is in terms of 'selfishness'. Each individual is said to be 'selfishly' (in phenotypic terms) benefiting itself, albeit through the 'cooperative' venture with the other. It is engaging in the relationship only because it stands to gain more food or other resources by so doing. Yet, where both partners make net phenotypic benefits, each is necessarily also 'altruistically' benefiting the other. Each individual, whilst making gains for itself, is also the immediate conduit of phenotypic benefits to the other (and is therefore, surely acting in a phenotypically 'altruistic' way), and by so doing is investing in the other's progeny (genetic 'altruism').[130] It should also be noted that in primates and other socially grouped animals that depend upon coordinated efforts in foraging and defence, 'cooperation' displaces individual activity as the primary form of behaviour. Such reciprocity entails a bias toward sharing and away from individual 'competitiveness'.[131] In addition to these 'altruistic' aspects, the wider ecological perspective should also be noted for, as reciprocation has the effect of supporting the reproductive fitness of the individuals involved, these relations arguably contribute to the sustaining of species.[132] Moreover, there is notable efficiency in these 'cooperative' ventures where, for instance, it involves the usage of another's extraneous 'waste' or even parasites in exchange for some required goods or service, or, where the efforts are synergistic such that members of a population together accomplish tasks which would be impossible for the individuals alone. Yet, reciprocal relations are not just ecologically efficient and supportive of species, the mechanisms, even among less cognitive species and non-sentient ones, can be extraordinarily elegant and complex.

The question is, of course, whether the mutuality and wider benefits of reciprocity are compromised by the instances of 'cheating' where the gains made are not shared between partners but are entirely, or mostly, one-sided. In response, it should be noted that although sociobiologists emphasise 'cheating' in nature, such 'exploiters' depend upon mutualism and 'honesty' being the mainstay in the natural world.[133] Consider large, bright flowers that

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[130] The aim here is to note the 'altruisms' within reciprocity over and against its sociobiological 'selfish' rendering. Rolston, however, is perhaps right when he suggests that the relationship itself should not be described as either 'selfish' or 'altruistic', for "neither of the reciprocating parties is sacrificing any fitness" overall for the other (Rolston 1999: 215) – there is simply an exchange to mutual advantage.

[131] Whilst 'competitive' behaviour plays an important role in survival (and ultimately in sustaining species – see Section 2.3.1), the point here is that, especially in the primates, survival is increasingly achieved, not by the 'competition' for resources, but through 'sharing' and 'cooperation'.

[132] The link between individual reproductive fitness and the maintaining of species was made in Sections 2.3.1 and 4.5. Thus, as reciprocation enhances reproductive fitness (as sociobiologists rightly note), it necessarily also contributes to species survival.

[133] This is not so for the predator-prey relationship in which, as Trivers notes, organisms frequently avoid predation by means such as camouflage (Trivers 1985: 395-420). This relationship, however, is not normally counted as a reciprocal one.

attract pollinating insects but offer no nectar, they are visited by insects only because, by and large, flowers of this type do provide nectar. In the same way, cleaner fish are allowed access to the mouths of their hosts because, in most instances, these cleaners remove parasites and not host flesh. 'Honesty' in nature is the primary and most pervasive form of reciprocal relations. Moreover, where natural selection does effect 'exploitative' behaviours, selection pressures will also lead to redress – mechanisms arising that have the effect of diminishing the 'exploitation'. So, for example: the client fish of cleaners who 'cheat' may develop the capacity to be 'choosy', exhibiting an ability to prefer some cleaner stations over others (the ones where 'cheating' is less frequent); predatory clients may respond by consuming the cleaner; and even non-predatory ones may counter 'cheating' by chasing the cleaner fish when it bites off flesh (Bshary & Noë 2003: 176; Bshary 2001: 169).[134] Often where there is no such counter response, it is because the cost incurred by the 'cheats' is negligible (Bronstein 2003: 196-197). Indeed, it is probably because reciprocity incurs sufficient benefits and 'exploitation' risks counter strategy, that 'exploitation' is not a preferred and "superior strategy" (Bronstein 2003: 197-198). Even where there are instances of 'cheating' such that more is taken from the interaction with no or little phenotypic 'work', it must be recalled that the energy obtained is not ultimately directed at the self, but toward the 'altruistic' investment in others, namely, progeny.

Whilst one may rightly wonder at the appropriateness of applying human categories of behaviour like 'cheating' to organisms like fish, this is seemingly less problematic in the descriptions of primate behaviours. Consider the chimpanzee that 'feigns' being hurt in order to gain reciprocal alliance support or the primate individuals who seemingly 'cheat' by giving food calls only when others are watching and not otherwise (e.g. de Waal 2001: 304). Naturally, such behaviours could not become entirely commonplace, as this would lead to the primate members neither attending to expressions of pain

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[134] It may be that this process of response and counter response contributes to driving the evolutionary process forward.

in others nor expecting food calls. Nevertheless, this seemingly endorses the idea that human deception and cheating, as it is observed in other primate communities, are innate behaviours generated by natural selection. It certainly shows that human and non-human primates are subject to a number of drives and instincts, which at times will generate conflicts of interests. In the food calling, it is presumably that the instinct for self-preservation, the eating of a good source of food, is competing with the established rules of reciprocity in the group. The call is given when the individual is observed because of the learnt knowledge that this avoids reprisals from other members. The instincts for self-preservation and reciprocal relationships are necessary both for the survival of the individual *and the group, and will have co-evolved.*

The way in which primates resolve internal conflicts cannot be known for sure, but it seems unlikely that they have a capacity for self-conscious evaluative judgement on a par with that of humans. In an equivalent human scenario, such conflicts are accompanied by self-conscious reasoning and the perceived need to choose between alternative outcomes (except where youth or illness has effected cognitive limits or habit ingrained certain responses). Indeed, Daniel Povinelli and Laurie Godfrey in their assessment of chimpanzee behaviour, including the ability for "deception" and "pretending", conclude that they cannot be attributed high-level intentionality as they do not exhibit an "active pedagogy" (Povinelli & Godfrey 1993: 302-309; a similar point is made by Rolston 1999: 109f). Chimps seemingly have a much weaker theory of mind than humans do, as they have significantly less capacity to self-consciously evaluate behaviours and assess the content of another's mind – this is due, in part, to the absence of sophisticated language (Povinelli & Godfrey 1993: 302-309; Rolston 1999: 109-110). So, although the psychological features of humans in reciprocation will be more fully discussed in the next section, it is suffice to note here that while humans cheat because they are consciously aware of the deception occurring in the exploited other's mind, it is not clear that other primates have access to these high-level informational states. Thus, although primate behaviours reveal the inner tensions that are within the human psyche, the cognitive process which leads to *responsible* action is probably a distinctively human feature. This element of responsibility, and its corollary of choice, already indicate that cheating is not an inevitable feature of human behaviour.

5.4 A Critique of the Human Psyche as 'Designed' only to Reciprocate and Cheat

There is every reason to accept that humans participate in reciprocity, given both its precedence in other primates and the observation of that universal of human behaviours, the reciprocal system of economic trade. An important aspect of such reciprocal relationships is undoubtedly the human ability to rationally evaluate possible outcomes so that judgements can be made with regard to exchanges. This capacity to reason and make value judgements, is not just necessary for reciprocation but, as Ayala noted, is a general requirement for survival (Ayala 1995: 118-121). Martin Nowak and Karl Sigmund add to this the capacity for empathy, the emotional ability to sympathise with the needs of another individual and therefore to direct reciprocal efforts in an effective way (Nowak & Sigmund 2005: 1291). All of this is supported by the human ability for sophisticated language and abstracted thinking so that detailed societal rules for reciprocation can be assimilated and acted upon. In fact, given these abilities, which are so uniquely developed in humans, it is perhaps not surprising that human levels of cooperation far exceed anything that is seen in other animal species (Hammerstein 2003: 83-93; Bowles & Gintis 2003: 430). Certainly, it seems very likely that these abilities emerged under natural selection pressures for mediating cooperative reciprocal relationships, as well as for care within the nuclear family and general survival. The matter is whether sociobiologists are right in seeing all human relations with non-relatives as bound by this reciprocity, and as disposed to gross and subtle cheating. In fact, whilst they acknowledge the human ability to form mutual cooperative ventures, much more often the stress is placed upon the innate bias toward cheating, deception and counter deception.

So, rationality, that "predisposition to reason mathematically" is thought to have evolved simply "as a mechanism of ever more devious cheating, and ever more penetrating detection of cheating in others" (Dawkins 1989: 188). It aids the human in "detecting imbalances, and deciding whether they are due to cheating or to random factors" (Trivers 2002c: 36). As rational analysis often takes too long, however, it is the emotions that serve as the primary guide to the fittest behaviour in this world of reciprocity with its deceptions and counter deceptions. Emotions provide the "quick and dirty solution" to lengthy rational calculation (see Ruse 2002: 157; also Wilson 2001: 64-65). It is Robert Trivers who has given particular attention to interpreting the variety of human emotional responses in terms of reciprocity and cheating, and many of his ideas have recently been endorsed by the work of Daniel Fessler and Kevin Haley.

According to Trivers, the human sense of fairness and moralistic anger are protective mechanisms intended to guard against cheaters (Trivers 2002c: 39-40; 1985: 388; Fessler & Haley 2003: 12-13). Whilst this seems acceptable, given its similar function in other primates, Trivers goes on to say that such moralistic anger is always well communicated to others because it is not just about insisting on justice, but about influencing others to enter into further reciprocal relationships with the seemingly fair moralist – it is a reputation gaining scheme (Trivers 1985: 389). Sympathy and empathy are acknowledged as important in evaluating the needs of others: "Crudely put, the greater the potential benefit to the recipient, the greater the sympathy and the more likely the altruistic gesture" (Trivers 1985: 388).[135] Although this may sound like genuine psychological altruism, the sociobiological view is that benefits to the other must occur at a relatively small cost to the self and again, that there must be reputation gains – public recognition so that

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[135] Gratitude is also seen as an emotional response geared toward a sensitivity to the cost/benefit ratio, such that the greater the cost to the other, the more the gratitude of the individual (Trivers 2002c: 40-41; 1985: 388; Fessler & Haley 2003: 16, 11).

ultimately net benefits accrue to the seemingly empathetic benefactor.[136]

Fessler and Haley add to this list "contempt" which they consider allows an individual to defect from reciprocal relationships that are not productive (Fessler & Haley 2003: 16-20). "Righteousness" is seen as the "rewarding state experienced as a consequence of rule adherence" in reciprocity, and a similar function is attributed to "pride" (Fessler & Haley 2003: 17-19). "Shame" acts an indication of the individual's inequality or inferiority in reciprocal encounters that will be resolved either by appeasing superiors or by expressions of anger (Fessler & Haley 2003: 18). The former is intended to try to maintain the reciprocal relationship despite its inequalities, while the latter serves as proof to others that the angry individual is willing "to incur high costs in order to inflict harm on transgressors" and serves to pre-empt any further exploitation (Fessler & Haley 2003: 18). The seeking of "moral approbation", the approval of others by enacting seemingly phenotypically costly acts "in fact contains a hidden benefit for the actors in the form of advertising the actor's norm adherence, an action which increases the actors' attractiveness as a partner in future cooperative enterprises" (Fessler & Haley 2003: 25). As a consequence of these benefits, people are said to compete for such publicly approved and praise worthy positions (Fessler & Haley 2003: 24).

Trivers considers that the self-directed motivation is seen particularly in guilt and reparative justice, which are intended as means of redress *only* when one is found to be cheating so that reciprocal relationships can resume. The feelings of guilt are appropriate only if the cheater is found out, as the tendency to cheat is in itself entirely natural and adaptive (Trivers 2002c: 41;

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[136] Similarly, Smith concludes from studies of Amazonian villages, that where there is caring for the incapacitated and ill (a costly act), there is a tendency to defect (stop caring) when the person is unlikely to recover and this is only restrained by the public image gained by the carer as one who sustains costs for common goods (Smith 2003: 413-414). Conversely, Boehm argues that caring for incapacitated individuals is not reciprocity but genuine altruism, and supports his view both on the basis of group selection (discussed in Chapter 6) and on the ability of humans to express genuine concern (Boehm 2000: 213).

1985: 389). "It should often be advantageous to confess sins that are likely to be discovered before they actually are, as evidence of sincerity" but not those that are likely to remain hidden (Trivers 2002c: 41-42). Yet interestingly, humans are sensitive to "sham guilt", effected sympathy and gratitude, and instead search for a sincerity that they themselves cannot supply (Trivers 2002c: 42).

This paradoxical desire for sincerity in others, whilst encouraging one's own deceit, is resolved, according to Trivers, by the phenomenon of self-deception. The human psyche is such that cheating is able to occur at one level and the posturing of sincerity at another; it does this by making people unaware of their own motivations. In this way, an act of deception can be perpetrated without any qualms or feelings of guilt, which are themselves associated with tell-tale signs such as red faces and sweaty palms. In order to deceive effectively, it is useful for the self to be deceived also (Trivers 1985: 415-416). Thus, the human psyche is marked by "self-deception where the truth is hidden from the conscious mind so as to better hide it from others" (Trivers 1985: 415). As this must also be associated with a keen sense to discover deceivers and a "true apprehension" of oneself (in order to engage in overtly deceptive behaviours) – the result is a mind that is split between "public and private" portions "with complicated interactions between the subsections" (Trivers 1985: 415-416). In Trivers' view, it is for this reason that human psychology is necessarily so complex (Trivers 2002c: 38).

Language itself permits further sophisticated deceptions in that it allows humans to deny responsibility for any harm done to others and to overstate good deeds. In an example of the latter, Trivers cites what he sees as the Matthean exaggeration of Mark's account of Jesus' healings (Trivers 1985: 418-419). In fact, through language: "Individuals readily create entire belief systems with self-serving biases, and the more skilfully these self-serving components are hidden from both the self and others, the more difficult it will be to counter them" (Trivers 1985: 416). So, one must expect of any acts of beneficence that they are directed "to make one's self seem more altruistic than is the case" and "to influence others to be more altruistic in such fashions as to be deleterious to themselves and beneficial" to the self (Alexander 1985: 12). As such:

> Deception and hypocrisy are neither absolute evils that virtuous men suppress to the minimum nor residual animals traits waiting to be erased by further social evolution. They are very human devices for conducting the complex daily business of social life. Complete honesty on all sides is not the answer. (Wilson 2000: 553)

The human psyche in relationships with non-relatives is, at best, constructed in terms of an insistence on directly returned benefits or reputation building, but more often, as a manipulative cheating, hypocrisy, deception and self-deception. These selfish psychological dispositions obviate against the occurrence of any form of genuine altruism.[137]

In response, it has already been noted that it seems reasonable that human abilities and emotional capacities have been generated by natural selection to effect reciprocal relationships. The problem is not human reciprocity per se (Section 5.3 has noted its phenotypic and genetic 'altruisms', as well as species benefits) but the sociobiological view that it is a comprehensive description of all relationships with non-relatives, and that it involves the necessary features of cheating and deception. With regard to the issue of its universality, surely the case can be made that whilst humans commonly use reciprocity in the exchange of goods/money, they make a distinction between this economic context and situations relating directly to persons. Consider the difference between the advocacy for a vulnerable person and that for a fair price. The latter will naturally seek reciprocation in mutual (self- and other-) benefit, but the common expectation of the former is that it will be other-centred (non-reciprocal) with its focus on the benefit to the vulnerable

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[137] Whilst behaviours such as cheating fit with the common understanding of selfishness, it must be recalled that according to its sociobiological meaning, cheating is selfish because it ultimately provides a means of improving the individual's reproductive-replicative fitness.

individual.[138] While reputation building is good in an economic context, it is usually deemed hypocritical when it is directed toward persons. The individuals who help others so as to facilitate their direct gains or reputation and thereby self-benefit are not normally lauded. This is to be expected given that humans, through empathy and the subjective sense of the other, tend to see other humans as persons having individual worth. It is arguably for this reason that while reciprocation is the commonly accepted standard in exchanges around commodities, the expected norm for relationships that directly involve persons is that they will be characterised by a psychological altruism that is genuinely concerned for these individuals. This non-reciprocal character is not only evident in human relationships[139] but also in the human care for non-human animals (e.g. Clark 1997: 106f)[140]. Humans, of course, also commonly show the ability to pursue self-gratification as an end in itself (egoism) at the cost of both human and non-human animal others.

The second sociobiological thesis, the conviction that deception is entirely natural, rests on the view that it is both pervasive within the natural world and in human culture. Indeed, it is clear from an observation of society that humans do cheat but it is not self-evident that this is the prevalent way of the natural world – a point made in Section 5.3.[141] It is also not a necessary result

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[138] The sociobiological construal of reciprocation as an ultimate concern for self-benefit, must be distinguished from a two-way psychological altruism where both parties in a relationship express a concern for the other (see discussion of the relationship between believers in Chapter 8, friendship in 7.3.1 and 7.3.2, and human sexual mates in Appendix 3).

[139] This capacity can be seen in the altruistic concern for strangers with whom there is no assurance of reciprocation (further examples in the care of the weak and the enemy are explored in Sections 10.2 and 10.3). Notably, although chimps will come to the aid of those known to them, kin or a reciprocating partner or even a human keeper, it is not yet clear that they will assist strangers as has commonly been shown in humans as young as two years – an effect in which empathy is believed to be critical (see Silk, Brosnan, Vonk, Henrich, Povinelli, Richardson, Lambeth, Mascaro & Schapiro 2005: 1357-1359; Barber 2004: 203; Sagan 2000: 47).

[140] Consider the human concern for the distress and suffering of non-human animals such as those used in medical research and in intensive farming. This care, which is mediated by empathy and the awareness that these non-human animals are in some sense subjective beings, may be a direct reciprocal disadvantage to humans as, at the very least, it limits the use of them in research (thereby potentially reducing human medical benefits) and seeks to enhance the welfare of farmed animals and thereby increase the cost of animal products.

[141] There is some circularity here as the human experience of cheating is seemingly being

of the human psyche itself – the motivational propensities that humans bring to all relationships have been shown in Chapter 4 to be a tensive mix of self-directed care (hedonistic tendencies) and the other-directed impulses of empathy and the subjective sense. The way that humans resolve these within a reciprocal relationship is somewhat open. Where human motivation takes account of both the self-directed and other-centred senses (an awareness of one's own as well as the other's needs), the consequence will presumably be fair reciprocal exchanges. In situations where the motivation is entirely self-directed, an egoistic preoccupation with the self only, the result will be a focus only on the gains to the self. It is arguably in such instances that cheating and deception occur. Notably, such acts must surely require a de-emphasising of the other-centred senses in favour of self-centredness – a diminishing of the empathetic impulse, a cognitive avoidance of the other as a subjective being and a self-conscious rationalisation to this end. Cheating is possible within the human psyche but it is not inevitable.

As humans carry both self-directed and other-centred propensities, the specific meaning or content of human emotions, whether gratitude or shame, guilt or admiration, also depends upon how these two drives are resolved. So, for example, in one person the expression of guilt may be entirely self-directed, either shammed on being caught or as feelings of unease (more akin to embarrassment) generated only by what others may think. In another individual, it may be a genuine sense of guilt stemming from an empathetic awareness of how others have been wronged and hurt by the individual's action.[142] Notably, Trivers' construal of empathy as having a self-directed motivation as it serves to reputation build is contrary to Batson's work on this sense which showed that it was unaffected by self-directed motivations such as fear of reputation loss, social punishment or reward (Batson 1991; see Section 4.5). This, of course, does not mean that humans are not able to feign empathy for self-directed purposes. Yet, there is no reason to accept

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read into nature and then in turn is used to endorse the naturalness of this human behaviour.

[142] Aggression, likewise, may be preoccupied with the self or with the welfare of others.

Trivers' presumption that only self-directedness in human emotions is possible.

Moreover, the matter of which of these two drives predominate in a particular occurrence will not just depend upon which drive is experienced as the strongest (as perhaps is the situation with other primates) but also upon which is attended to at the level of personal choice and habitual ways of thinking. As was indicated at the end of Section 5.3, unlike other primates, adult and cognitively competent humans often have a capacity for choice, and are deemed responsible on these grounds. An important aspect of human choice is the cultural values that the individual espouses. Trivers' view that cultural beliefs are themselves self-serving, of course stems from his conviction that culture is entirely subject to natural selection – a point countered in Chapter 3. So, whilst cultural beliefs and ideals may indeed favour self-directedness and even cheating,[143] one might reasonably expect that there will also be other cultural views that emphasise other-centred care, both as justice and as an altruism that is beyond reciprocal limits.[144] In fact, if the human psyche and its cultural beliefs were so constrained by natural selection, as is assumed by sociobiologists, then humans would be motivated to use the gains from reciprocation simply for reproductive-replicative fitness, such as producing a maximal number of viable young, and would only espouse values to this end. Again, this is not what is observed, as humans transcend this criterion, both in a genuine altruism, which surpasses such outcomes, and in an egoism where gains are used in pleasurable endeavours that have little or nothing to do with such matters as producing lots of healthy progeny.

Some further comment is required with regard to the matter of cheating and self-deception. The appeal to self-deception means that any genuine altruism

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[143] Sociobiology itself, when assumed as an ideological framework, may increase the likelihood of cheating in its adherents given that it accredits legitimacy to this behaviour.

[144] Consider the trade justice movements within the UK that are campaigning for a fairer trade between the West and the Two-thirds (Developing) World, and are also involved in various charitable works in these poorer countries.

is argued out of hand for no reference can be made to one's own experience as it is necessarily deluded, if it identifies true altruism, although probably very accurate, if it spots cheating. There is no doubt that self-delusion does occur, but one wonders how the human psyche has evolved to be so accurate in identifying cheating in others, but only in one's self when it is appropriate (presumably when cheating is felt to be warranted), and is otherwise completely self-deluded when it identifies real acts of altruism in one's self and others. How does the same mind differ so greatly in making these assessments? There is surely an inconsistency that hand-waving about self-deception cannot cover. As de Waal notes: "The quasi-scientific concept of the subconscious conveniently leaves the fundamental selfishness of the human species (purported by sociobiologists) intact despite daily experiences to the contrary" (de Waal 2001: 347-348; also 2005: 79). There is also an overlooking of the conscious processes that occur both in self-appraisal and in self-delusion. With regard to the latter, consider the child abusers who repeatedly tell themselves that their acts are acceptable because "no harm has been done" or "the child deserved it". The necessity for oft-repeated justification and habituation shows that the person clearly has some conscious knowledge in the process. Self-deception, like self-appraisal, does not just happen but involves cognitive reasoning and choice.

Further, it cannot be sufficiently emphasised that if cheating, deception and self-deception are innate features of humankind then this applies not just to economics, ethics and religion, but to all areas of life, *including science*. Alexander is aware of this and acknowledges, in accord with his view, that scientists are motivated by their own careers and the ensuing benefits and will cheat to this end (Alexander 1987: 204). He considers, however, that science, unlike other areas of knowledge, forms a "self-correcting method of seeking the truth" because it entails an openness in which scientific knowledge is made publicly available, and more specifically because it involves the criterion of repeatability by which scientific results are experimentally tested and verified by others (Alexander 1987: 210-204). As such, science is not subject to the prevalent deceptions and cheating found in areas such as religion. In reply to this view, it should be noted that Sociobiology itself does not fulfil that key criterion of experimental repeatability (a point made in Section 3.3). Sociobiology is a historical science that is not concerned with the immediate physical causes of a behaviour (which can be tested by experiments), but with the ultimate causation from the perspective of evolutionary time.[145] It is because of the absence of experimental repeatability that there is a substantial degree of interpretation involved in the process – a point underlined in Chapter 3 by the contrasting positions taken by these biologists in their explanations of behaviour (whether Wilson's co-evolutionary approach, Dawkins' memetic theory or that of evolutionary psychologists). In fact, one could say that, considering the absence of the repeatability criterion for sociobiological interpretive claims, along with, arguably the influence of strong commitments to the naturalness of cheating and deception, one might expect that the work of sociobiologists should be treated as particularly suspect. Their argument for a cheating human psyche is essentially self-defeating to their purpose, which is to present Sociobiology as the arbitrator of truth. In summary, the sociobiological view that humans are necessarily bound to reciprocity and cheating in relationships with non-relatives has been shown to be far too simplistic. Whilst humans naturally expect reciprocal returns in economic contexts, this is not the standard commonly looked for in personal relationships where the expectation is rather of altruism. Moreover, it is only when hedonistic drives are attended to at the expense of other-centred drives that reciprocal relations move from fairness to cheating and deception.

5.5 The Limits of Reciprocal Explanations in Game Theory

Human reciprocity was very early on endorsed by game theories[146]. Under a

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[145] In fact, sociobiologists rely very much on criteria such as coherence and fruitfulness, which are also the means of truth testing in areas like ethics and religion.

[146] Game theory itself began in the 1940s with the work of John von Neumann and Oskar Morgensern as a means of permitting an analytical approach to human conflict (Maynard Smith 1978: 141).

search, initiated by Robert Axelrod in 1980 for game solutions to Prisoner's Dilemma[147], the Tit for Tat strategy proposed by Professor Anatol Rapoport was found to be the most effective – a strategy that described well the key aspects of the direct form of reciprocation. Rapoport suggested that in a situation where an individual may either cooperate or defect (cheat), the most successful tactic, the one that was both stable[148] and conferred ultimate benefits, was to cooperate first in each interaction. If the other player defected (cheated), however, then the player should respond with defection, and continue to respond in kind in any further interactions (Axelrod & Hamilton 2001: 148f). This strategy was further amended because, as Axelrod noted, Tit for Tat can result in endless rounds of defections (feuds) once the defect strategy is initiated and must be buffered by "forgiveness" in which one instance, but not repeated occurrences, of defection is forgiven so that cooperation can restart (Axelrod 1990: 120). It should be noted that forgiveness is seen as being entirely for the forgiver's self-benefit, and for this reason it cannot be unconditional, otherwise the forgiver will continue to lose out.[149] The self-centred presumption in reciprocal explanations is also evident in the suggestion that defection is a good strategy when it occurs towards the end of the game, that is, when you are unlikely to meet the player again (Axelrod & Hamilton 2001: 145). Thus, whilst Tit for Tat perhaps tempers the sociobiological emphasis on cheating as an initial and primary strategy (over cooperation), it correlates with the central features of biological reciprocity,

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[147] Prisoner's Dilemma is the scenario in which two individuals are arrested separately and offered the possibility that if one of them implicates the other (defects) then that one will gain a reward and be released, while the other will remain in prison. If, however, they both refuse to tell on the other (cooperate) then they will both be released. If they both confess, they will both serve long sentences.

[148] Here, 'stable' means a behaviour that in computer simulations does not allow another strategy to replace it. So, a population made up of those that only and always cooperate, is said to be unstable because it can be invaded by cheats (defectors) who will, as a result of exploiting cooperators, begin to outnumber them. These simulations are often correlated to population genetics and so to social behaviours and human society.

[149] Notably, it could be argued that in the New Testament forgiveness is unconditional (Mt. 18: 21-22) and although it challenges the defector, it is with the aim of reinstating them and protecting those vulnerable to the defector's actions – it is thus primarily directed toward others and not to self-benefit (issues discussed in Section 10.3). It should be noted that Axelrod considers that religious unconditional forgiveness is not other-centred but simply represents our own desire to get away with defecting against others (Axelrod 1990: 136-137; 118-120). We advocate it only so that we can be forgiven.

namely, that humans cooperate in a way that is directed by self-interest and which may lead to cheating and counter reprisals.

Reciprocity has since been tested for its application to human society in actual games played by volunteers. The experimental data indicate that, with regard to the exchange of money, humans do participate in exchanges in a reciprocal Tit for Tat manner. In games of continuous monetary exchanges, most players cooperate, although some do defect (cheat), and these defectors are often punished by the subsequent defection of the other players towards them. In a Swiss study, for example, it has been shown that even when participants meet only once in a round, the tendency is for the player to be cooperative (cited in Nowak & Sigmund 2000: 819). In this study, players had to make one-off donations to each other which could be reciprocated or not – the result was that most were generous. Whilst this is an expectation that goes against the economic theories that humans always act for immediate self-interest[150], and mitigates somewhat the sociobiological expectation of a primary cheating bias, it is in keeping with the Tit for Tat type of reciprocation. Moreover, in other games in which the players were made aware of the other participants' scores, a points system which indicated the degree of defection, it seemed that reputation (indirect reciprocity) became an important feature. Players were more generous toward those who were not defectors (Nowak & Sigmund 2005: 1296; Fehr 2004: 449-450).

Yet, whilst reciprocation evidently occurs, the result from such games has indicated that there are also limits to the extent in which reciprocity can explain the observed behaviours. In the last study cited, for instance, as the scores represented the times of defection and not the circumstance, both those who defected out of self-interest (who offered low or no money) and those who punished defectors (by defecting in response), had their scores

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[150] The inadequacy of the individual cut-throat self-interest, which is presumed in economic theory, has recently come to the fore and the idea that people are fundamentally cooperators is beginning to influence even top-level businessmen who are keen to incorporate it in their business strategies (Meinel 2006a and 2006b).

equally negatively affected. Yet, there were some players who despite the detrimental effect of defection on their net gains continued to punish those who initiated the exchange with defection, and only rewarded cooperators. They persisted in these behaviours despite direct reciprocal and indirect reputation losses. Colin Camerer, Ernst Fehr and Joseph Henrich have suggested such data indicate that some players are "strong reciprocators" who will consistently reward and punish even at personal cost (Camerer & Fehr 2006: 48; Fehr & Henrich 2003: 55-57). The more positive form of this strong reciprocity, its expression in terms of giving rather than punishment, is also evident in studies like that by Manfred Milinski of the Max Plank Institute (cited in Randerson 2002). Students started in a game with the same amount of money and had to either donate the money to other students in exchanges with the aim of ending up richest, or they could choose to donate to UNICEF – a charitable action but without reciprocal benefits. The results showed that there were persons who preferentially chose to donate most to charity even though they did not gain financial rewards.

As this strong reciprocal behaviour is counter to either direct or indirect reciprocity, it is seen by some as a maladaptation – a behaviour that was ingrained during the period when humans lived in small groups in which the circumstances of exchanges would be known, but is inappropriate in the present game scenario (cited in Fehr & Henrich 2003: 56). Others have suggested various means by which the behaviour may, in fact, be adaptive despite its seeming costliness – these include explanations such as shunning[151], docility[152] and the drop-out option[153]. Some continue to maintain

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[151] Here, rather than defectors being punished, an act that incurs a cost for the punisher, they are simply shunned and future cooperation is withdrawn. In this way, the strong reciprocator loses nothing (Panchanathan & Boyd 2004: 499-502)

[152] Docility refers to the tendency of humans to learn and imitate the actions and beliefs of influential others – an essential ingredient in the acquiring of survival skills (Simon 1990: 1666). According to this view, if the skills are learnt along with the costly behaviour, then as long as it is not too costly, the behaviour will be established within the population (Simon 1990: 1667).

[153] The drop-out option represents those who can gain an income independently of others. Strong reciprocators can act in the way that they do because, due to their drop-out option, their partnerships are formed on a voluntary basis and not out of necessity (Hauert, De Monte, Hofbauer & Sigmund 2002: 1130-1131).

that direct and indirect reciprocation are sufficient explanators.[154] Interestingly, at the end of Milinski's game, one player was to be chosen as a representative of the group, and although the charitable individuals were not preferred in reciprocal encounters, they were repeatedly chosen by the group as their representative (cited in Randerson 2002: 15). It could be argued, therefore, that such strong reciprocators are not just favoured by others, but by sexual mates as well. As such, the behaviour, whilst extended beyond reciprocity, has hidden reproductive benefits. This is similar to Randolph Nesse's and Leonard Nunney's argument that individuals are "kind" and "benevolent" to a wide range of others because this ultimately accrues reproductive benefits as such individuals are preferred as sexual mates and make more caring and effective parents (Nesse 2000: 227-231; Nunney 2000: 231-236). The problem with such an interpretation is that such characteristics, whether kindness or strong reciprocal justice and generosity, must lead simultaneously to reproductive losses because they are extended to others beyond the bounds of kinship ties and reciprocity. Any benefits to the individual's reproductive fitness, such as through the care of offspring, are countered by the many instances of benefit to others outside the kinship and reciprocal partnership circle. In fact, in accord with sociobiological standards, it is not strong reciprocators in the form observed here that would be preferred in mate selection, but ones that exhibit a concern for fair exchange and generosity only when it benefits themselves or family members. This is not what is observed in the game events where the individuals expressed their costly non-reciprocal behaviour toward non-kin participants.

Contrary to these individual selectionist views, Fehr and his colleagues have themselves argued that this behaviour is genuinely phenotypically costly with regard to the individual, but that it is propagated and established because it garners benefits to the group (Fehr & Henrich 2003: 77; Fehr & Fischbacher 2003: 785-791). The consequence of strong reciprocators is that the group

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[154] An example is Colman's criticism in a review of a recent work by Fehr and Gächter advocating strong reciprocity (Colman 2006: 744-745).

with such members succeeds over other groups; the behaviour is not maladaptive but rather a stable evolutionary strategy based upon group selection. Although a fuller discussion of group theory must wait until Chapter 6, it is suffice to note here that it depends upon a strict set of conditions including that the benefits are limited to the group only – the strong reciprocator must *not* be inclined to benefit non-group members. This is not what happens in the game events where the behaviour is expressed in an anonymous setting, that is, toward participants whose group membership is not known. Presumably Fehr and others see the behaviour as having evolved from situations where group membership could be more easily identified.

Further, group selection explanations, like that given by Fehr, assume memetic theory and therefore that behaviours, such as strong reciprocity, are not genetically inscribed but are rather culturally derived and passed on through imitative learning. Certainly, a cultural source would explain why such strong reciprocity is apparently only seen in human relationships, and not within any other primate groups (Fehr & Henrich 2003: 60). Although Fehr and his colleagues find it necessary to constrain themselves to natural selection explanations of how this culturally imbibed behaviour has become established, the point made in Chapter 3 is that there is no requirement to do so. It may well be that the sense of justice and generosity that inspired the strong reciprocators has a cultural and ideological source quite apart from natural selection. It is an omission that such information as the participants' worldviews was not considered important in the analysis of game studies.

The assumption often made is that game results reflect general human social behaviour. This, however, is questionable considering the limits that these games impose. Players are obviously aware that their interactions are neither ultimately serious nor long-lasting – this could bias behaviour toward increasing self-interest or even stronger care for others than would have occurred in normal circumstances. It should also be noted that the interactions occurred around the issue of monetary exchange – in normal life this revolves around the exchange of goods/objects. As was argued in the section above, in such market conditions, reciprocation is extremely common and entirely acceptable. It was also noted that gaining a reputation in economic life (indirect reciprocity), such as that for being a fair tradesman (a good cooperator) or skilled worker, is acceptable and to be applauded. Therefore, the fact that direct and indirect reciprocity were found to be the primary modes of behaviour in such games is hardly surprising, and whilst it supports the view that reciprocation is part of the human make up, it should not be interpreted as an indication of its comprehensiveness. Indeed, it is surprising that in these economic exchanges there were instances of strong reciprocation in which reciprocity was contravened.

This is even more remarkable when one considers the impeding of the natural empathetic process in such games (as was mentioned above, this other-centred sense is important for fairness in reciprocity). Students were not supplied with the kind of information that would facilitate empathy such as the personal contexts of other players, for instance, whether they were in need or had heavy responsibilities. This detachment from real life situations makes the games inevitably artificial and may orientate the player toward an increased self-centredness as the players are aware of their own interests but not those of the others.[155] The possibility of charitable donations mitigates this to some extent, although whether information is immediately presented to a player about the lives benefited by the charity is important. Human empathy is engaged by cues such as face-to-face interactions and stimuli that inspire the imagination.[156] It would be interesting to compare results between game events with and without these personal contextualisations. Thus, the instances of cheating and the absence of generosity seen in these studies must reflect, to some extent, the impersonal structuring of the games. This is not to say that people do not cheat for self-serving purposes even

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[155] It is perhaps rather like the economic trade that occurs electronically rather than through face-to-face interactions, and which perhaps makes cheating and unfair exchanges more frequent.

[156] Noted by Sober and Wilson (1998: 237).

when they are aware of the personal implications for others. Nonetheless, the behaviours in these games, both in the instances of cheating and the prevalence of reciprocity, should not be hailed as an indication that they are comprehensive explanators of all human social life. Again, what is surprising is that there were some in these economic and impersonal games who exhibited selfless generosity and/or a strong sense of justice that transcended reciprocal interests.

5.6 Conclusion

Reciprocity is undoubtedly a feature of biological existence that has been effected by natural selection. It is observed in a wide number of species including the primates. Its emergence under natural selection has, along with the necessary commitments to the nuclear family and to general survival, mediated many important human features such as the rational capacity, language, aggression and empathy. The subject of concern in this chapter has been, not the occurrence of reciprocity, nor its natural origins, but rather its particular characterisation by sociobiologists. The sociobiological view that reciprocation is essentially genetically and phenotypically 'selfish' was countered by showing the many genetic and phenotypic 'altruistic' aspects that are involved, and the way that, due to its enhancing of reproductive fitness, reciprocation makes a contribution to species survival. Moreover, contrary to the idea of a pervasive 'cheating' in nature, it was argued that 'honesty' is more prevalent. This revision of the sociobiological interpretation of reciprocity frees it, at this foundational level, from being laden with the selfish rhetoric of Sociobiology.

With regard to human behaviour, it was noted that sociobiologists make two important claims concerning reciprocity. The first is that reciprocity is a comprehensive explanation of all human relationships with non-relatives. The second is that reciprocation has led irrevocably to a human psyche that is innately bound to cheating and deception. In moral terms, reciprocation is as self-giving as humans get toward non-kin, and even then, it is characterised by pervasive cheating and deception directed at avoiding the costs of mutual exchange. In reply, it was argued in this chapter that humans tend to use the standard of reciprocity in the exchange of goods in economic trade, but not in personal relationships. Further, while there is no doubt that humans cheat and deceive, this is not an innate necessity. If this were so, then it would be problematic for sociobiological writers themselves, as one might expect their texts to carry a fair degree of deception and misinformation. In fact, in contrast to this view, the point established in Chapter 4 was returned to, namely, that humans have both self-directed (hedonistic) tendencies and ones that are other-centred which orientate them towards the care of others. It is when self-centredness is given precedence in egoism that humans use their cognitive and emotional capacities to deceive and defraud. Where both drives are attended to an in economic (reciprocal) relationship, the expectation is one of mutualism – a fair and just exchange. Unlike all other species, this issue of directedness entails human choice, and consequently the reference to cultural and ideological values.

In fact, the expression of genuine psychological altruism is apparently seen in the most unlikely of places, game events. Here, *some* humans show a tendency to go beyond reciprocity both in exacting justice and in self-giving. This is remarkable because such games are often based on monetary exchanges, that area of human life most closely associated with reciprocity. Moreover, the contexts of the games are often impersonal and hinder the normal other-centred empathetic process. Thus, despite imposed limits, and in this most reciprocally biased of situations, humans exhibit a capacity to express care beyond the limits of reciprocation and toward psychological altruism. The sociobiological claim of providing a full and entirely non-altruistic account of human behaviour toward non-kin is seemingly untenable even in territory most amenable to its thesis.

Chapter 6: Group 'Altruism', an Overview and Critical Analysis

6.1 Introduction

This chapter critically examines the arguments put forward by some sociobiologists for group 'altruism' in nature and in human society. According to group theory, there are instances when an individual will provide aid to group members, including those who are non-kin and non-reciprocators, and these can be explained in terms of natural selection. In Section 6.2, the genetic basis for group 'altruism' in the natural world is presented and assessed. This section suggests that while it is theoretically possible, the stipulated requirements for this 'altruism' are so complex and stringent that it is unlikely actually to occur. This section also pays heed to the limits of this 'altruism' for group theory requires that this 'altruism' is neither too phenotypically nor genetically costly.

In Sections 6.3, the rationale for group 'altruism' in human culture is described and critically examined. It is argued that not only does the strict criteria for this 'altruism' make it unfeasible, but as was indicated in Chapter 3 (and Section 5.5), this 'altruism' is based upon memetic theory which was contended in this prior chapter to be unsound. Thus, it is argued that there is no reason to accept this sociobiological explanation for human group formation. Moreover, it is not clear that group theory adds much to the sociobiological understanding of human benevolence, for again, the costs (phenotypic and genetic) sustained by the 'altruist' in human group selection are limited. Further, the theory requires that this care is strictly constrained to group members, and that the relations with non-members are, at best, indifferent, and more likely, hostile. While humans evidently do form groups, it is contended in this section that this can be explained in terms of such circumstances as shared environments and common interests without the need of recourse to natural selection theory. The role of empathy and ideology in determining the nature of relationships within such groups and their response to those outside is also be briefly considered.

6.2 A Description and Critique of Group 'Altruism' in Nature

Group selection theory proposes that behaviours that are costly to individuals, 'altruistic' in phenotypic terms, can become established in a population under natural selection pressures because of their reproductive benefits to the wider group. Such behaviours are also genetically 'altruistic' as they go beyond kin and reciprocators to effect benefits to the local population which comprises of a whole set of genetically heterogeneous individuals.[157] Group 'altruism' was a popular idea within biology from the 1930s onwards and is often recalled in the form of V. C. Wynne-Edwards' article on a Scottish red grouse population. Wynne-Edwards proposed that individual members in this grouse population were refraining from both accessing food and reproducing so that others could survive and reproduce, with the result that the population as a whole would continue to thrive and not over-exploit its resources (see Wynne-Edwards 1978: 185-187). At about the same time that this article was presented, the seminal work *Adaptation and Natural Selection* by George C. Williams was published. This, in contrast to group theory, argued that the unit of natural selection was the individual and never the group (Williams 1974: 92ff). Natural selection led, not to individuals that at cost to themselves generated group benefits, but only to individuals that pursued their own reproductive and replicative fitness. This conceptual individualism has continued to be the primary influence within biology, one that relegated group selection theory as obsolete for many decades. Indeed, it was not until the recent work of the biologist David Sloan Wilson that the theory was, to some extent, reinstated within biological discourse (Boehm 2000: 211). Of Wilson's work, the most well-received is *Unto Others* (1998), a book co-authored with the philosopher of science, Elliott Sober. It is,

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[157] It is a phenotypic 'altruism' which at some expense to the 'altruist's' own reproduction enhances the reproduction of the group members and consequently, the frequency of their non-shared genes at cost to that of the 'altruist's' own (genetic 'altruism').

according to one commentary, "the clearest and most sophisticated treatise on group selection to date" (Laland, Odling-Smee & Feldman 2000: 221). As Sober and Wilson are key proponents of group 'altruism', this chapter will focus on the book by these authors, along with their summarisation in the edited collection *Evolutionary Origins of Morality* (2000). In this section, the discussion will critically review the gene-based processes and conditions that Sober and Wilson consider lead to group 'altruism' within the wider biological world.

Yet, it is first requisite to note that Sober and Wilson do not consider that selection for group reproductive fitness replaces that for individual reproductive-replicative fitness but that they co-exist – they represent two levels at which selection pressures can affect behaviour (Sober & Wilson 1998: 102ff). Notably, group selection must be distinguished from the argument presented in Chapter 2 (and onwards in this thesis) which is that wider benefits accrue to populations and species, *not because of group selection* where individuals acquire traits that are good for the reproductive fitness of the group, but because individual reproductive fitness is, by and large, good for sustaining populations and species (see Sections 2.3.1, 4.5, 4.6 and 5.3). Although both this viewpoint and group selection challenge present methodological individualism and contend for more global benefits, the two approaches are distinctive.

The mechanism by which group selection can support an 'altruistic' behaviour that incurs phenotypic and genetic costs is, at one level, reasonably straightforward. In order to become established, the primary condition is that the individual organism's 'altruistic' act must benefit the reproductive success of the other members in the group, including all other 'altruists' and often the individual itself. By so doing, the act increases the relative reproductive fitness of the group over other groups in the deme (Sober & Wilson 1998: 23-27). This is despite the observation that in each group the 'altruists' will necessarily lose out in reproductive terms, to some extent, to those not possessing this behaviour, the so-called 'non-altruists' or 'selfish' individuals (the ones who simply pursue their own reproductive-replicative fitness). Consequently, the 'altruists' will decline in number within the group over the generations (Sober & Wilson 1998: 23-26). The reason for the overall sustaining of the behaviour is that the reproductive fitness of the group with the most 'altruists' will be greater than those with fewer 'altruists', and even more so than the groups with no 'altruists' at all (Sober & Wilson 1998: 23-26; 2000a: 190). So, whilst the number of 'altruists' will decline within each group, they will increase in the overall global population.

Nevertheless, for such group 'altruism' to become established, a strict number of criteria must be met. It has already been noted that the behaviour of an 'altruist' must enhance the individual reproductive fitness of all, including other 'altruists' (Sober & Wilson 1998: 20f). So, whilst 'selfish' types will benefit more than 'altruists', as they bear no costs, both must be more reproductively successful than they would be in groups dominated by 'selfish' types. There is a reproductive cost to being an 'altruist' but it is a relative one (compared to 'selfishness'); it is far from an absolute cost. In addition, the groups must vary (that is, contain different ratios of 'altruists'/'selfish' individuals), and there must be inter-group 'competition' such that it is possible to speak of the reproductive success of the groups relative to each other. The groups must also be isolated long enough for the effect of the 'altruistic' behaviour to be seen within the group but they must not be entirely secluded (Sober & Wilson 1998: 26). In a completely isolated group, 'altruists' would soon be replaced by 'selfish' individuals and become extinct – there must, instead, be a flow between the groups at particular intervals. Moreover, this movement must result in new groups being formed in which, by an assortative process, the 'altruists' will tend to group with other 'altruists', and 'selfish' individuals with other 'selfish' ones so that the behaviours can become increasingly concentrated (Sober & Wilson 1998: 25-26). Only in this way can the selection pressure, which favours groups with more 'altruists', be maintained. So, while natural selection will favour 'selfishness' at the individual level (seeking only one's own reproductive-replicative interests), it can support 'altruism' at the level of the group if the above criteria are met. The two outcomes are in opposition and the one that predominates depends upon the relative success of each at making reproductive fitness contributions (Sober & Wilson 1998: 27, 33).[158]

Sober and Wilson see group selection as explaining the optimal- but not hyper-virulence of some viral parasites,[159] although others have given an alternative individual selection explanation[160]. Group theory is also said to be the most satisfactory explanation of sex ratios in populations, for whereas selection for individual fitness would favour a more even ratio of the genders[161], group selection favours more females (as this would increase overall productivity), and it is claimed that this is what is observed in most cases (Sober & Wilson 1998: 38-43; 2000a: 192-194). In fact, Sober and Wilson argue that kin and reciprocal 'altruism' can be interpreted in terms of group selection. With regard to kin selection, they argue that kinship units succeed because the fitness of one sib-group is greater than that of another sib-group (Sober & Wilson 1998: 67-69; 2000a: 191-192). Where there is an 'altruistic' trait that improves sib-group fitness, this 'altruistic' trait will become established in the population by group selection.[162] They suggest that reciprocal 'cooperation' can also be described in terms of group selection as

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[158] Indeed, the group selection of 'altruism' is very sensitive to the cost/benefit ratio (Cooper & Wallace 2001: 18), such that if the reproductive cost to 'altruists' were too high, and/or its benefit to others too low, the behaviour would not be sustainable and would give way to 'selfish' behaviours.

[159] Hyper-virulent strains will be favoured by individual selection as they reproduce faster than the others but because they reduce the overall infectivity as the host is more quickly incapacitated or killed, group selection will favour those that have lower individual virulence ('altruistically' reduced individual reproduction) but more maximal total infectivity (Sober & Wilson 1998: 45-46).

[160] Dawkins suggests that the degree of virulence depends upon the mode of infection, such that if the virus exits through the decaying corpse, it will exhibit hyper-virulence but if it is through the host's living body, such as by sneezing, then lowered virulence is optimal (Dawkins 1982: 221-222).

[161] This is because if the male ratio drops for some reason, natural selection will favour breeding couples who produce more females (the limiting resource) and vice versa if the female ratio drops – the result of which is an average equal number.

[162] According to their calculations, the sib-groups can remain together for up to 15 generations before they must disperse and reform assortative groups (Sober & Wilson 1998: 71).

the group of individuals that exhibit reciprocity toward one another is what 'outcompetes' 'selfish' interactors (Sober & Wilson 1998: 79-82). Taking the reciprocal formulation of Tit for Tat, Sober and Wilson contend that groups with more 'altruists' (in their view those exhibiting Tit for Tat)[163] 'outcompete' those with fewer 'altruists'. So, although the individual fitness associated with Tit for Tat is less than the 'selfish' strategy within a group, as the average fitness of assorted groups with more 'altruists' is higher, the number of Tit for Tat 'altruists' can show a global increase (Sober & Wilson 1998: 84-85). Whilst there is mathematical support for this group level explanation, the ones offered in Chapters 4 and 5, which interpret kin and reciprocal 'altruism' in terms of individual selection, are also plausible. Moreover, they are simpler as they are not restricted to the many necessary criteria that are entailed in group theory, requirements which include periods of group isolation, followed by dispersal, mixing, assortative grouping and so on. As the tendency within science is to adopt the lowest level explanator, the one that can adequately describe the data with the least number of assumptions and requirements, this would favour the individual selection explanations of kin selection and reciprocity.

It should also be noted that group selection is often seen as depicting a more 'beneficent' nature than the narrow individualism and genetic 'selfishness' that is the mainstay of individual selection theory. It is for this reason that Ruse suggests some are drawn to it, for it presents a “perennially popular alternative with those unable emotionally to face the stark nature of the darwinian process” (Ruse 2002: 154). Yet, this thesis has argued throughout that individual selection effects wider benefits to species and that even the most fundamental behaviour in the process, that of sexual reproduction, is far from phenotypically and genetically 'selfish'. Thus, group selection need not be invoked for indications of 'beneficence', or perhaps more appropriately 'other-directedness', in nature (discussed in Section 2.3.1). So, with regard to challenging the stark individualism and selfish rhetoric of Sociobiology, there

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163 The point was made in Section 5.3 (see footnote 130) that such reciprocation is not strictly 'altruistic' as it, at best, incurs mutual benefits.

is no necessity to refer to group selection theory.

Given that group selection is both theoretically possible but somewhat complex, it is perhaps not surprising that it has received a mixed reception among biologists. There are those like Lori Stevens who see many instances of group selection in nature (Stevens 2000: 243-248).[164] Even among sociobiologists, as was seen in Section 4.3, E. O. Wilson has recently argued in support of it over and against kin theory as an explanator for the 'altruistic' behaviour of social insects (Wilson 2005b: 159-166). Dawkins gives it rather more qualified backing by suggesting that it does not occur in biological nature, but that it does have a role in some areas of human culture, especially religion (Dawkins 2006: 169-171; Section 7.2). In contrast, Barrett, Dunbar and Lycett refer to the conditions for group selection as being so restrictive as to be unlikely to ever occur (Barrett, Dunbar & Lycett 2002: 380). Certainly, Ruse and the well-known biologist Amotz Zahavi[165] remain decidedly unconvinced and continue to see individual selection alone as a sufficient explanator (e.g. Ruse 2002: 154; Zahavi 2000: 253f). It is seemingly the view of Frans de Waal that kinship attachments and reciprocation, as effected by individual selection, are sufficient explanations for group relations within non-human primate communities (e.g. de Waal 2001: 350; Section 5.2). This perspective is the most persuasive for, as this section has indicated, while the gene-based formulation of group 'altruism' is theoretically plausible, the conditions for its emergence are so stringent that it is largely infeasible. Even if it were possible, this 'altruism' is notably limited as the behaviour must also have some reproductive returns for the 'altruists' – an implication which is taken up in the discussion of group selected explanations of human behaviour in the next section.

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[164] Stevens cites numerous examples from plants and beetles. At least some of these instances, however, such as the group defence in beetle larvae, can be given individual selection explanations in terms of reciprocity.

[165] Zahavi argues that all forms of 'altruism' entail some individual reproductive-replicative benefit – he cites as an example the bird species, Arabian babbler, where individuals 'compete' for the role of "altruistic sentinel" (warning others of threats) which he argues only occurs because it gives the 'altruist' added social status and consequently reproductive benefits (Zahavi 2000: 254-255).

6.3 A Description and Critique of Group 'Altruism' in Human Society

In the work *Unto Others*, Sober and Wilson contend that group selection has been an "especially important force in human evolution" (Sober & Wilson 1998: 132). Yet, because human groups, even indigenous communities, are so genetically diverse, the 'altruistic' behaviours cannot be facilitated by the co-evolutionary approach of a gene-behaviour linkage, but must come through the memetic inheritance of cultural traits (e.g. Sober & Wilson 1998: 149).[166] Whilst they acknowledge that culture enables a wide variety of behaviours to be established, beyond that which can be generated by the genes, Sober and Wilson consider these behaviours to be inherited and passed down the generations by learning and imitation through a natural selection process (Sober & Wilson 1998: 149-150). This process allows phenotypically and genetically 'altruistic' behaviours that effect group reproductive benefits to be selected. Indeed, as culture allows a conformity within each group to develop, as social norms are used to reinforce certain behaviours (Sober & Wilson 1998: 150-152), they consider that the consequence is that culture facilitates both inter-group variability and intra-group conformity which together create a strong basis for group selection. The conditions for this meme-based group 'altruism' are the same as that for its genetic equivalent – these include limits to the costliness of the behaviour, the temporary isolation of the groups, their periodic mixing and reassortment. The latter of these is seen as being fulfilled through the highly developed cognitive skills in humans that allow them to preferentially associate with those who share their norms and exclude others who do not (Sober & Wilson 1998: 135-141). A similar argument has been given by Robert Boyd, Peter Richerson and Joseph Henrich who see culture as increasing the variability among human groups and opening it to the group selection of 'altruistic'

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[166] Those like Trivers, Alexander and Barash, see kin and reciprocal relations as providing a full account of even the human behaviours that lead to group cohesion – a perspective in which any reference to group selected 'altruism' is unnecessary. Although their view of kin selection and reciprocity as comprehensive of human affairs was contested in Chapters 4 and 5, this was notably not on the grounds of group selection, but rather because humans have the ability to go beyond natural selection.

behaviours (Richerson, Boyd & Henrich 2003: 366-368).[167]

Setting aside their assumption of memetic theory (a point that will be taken up later in this section), it is worth considering an example given by Sober and Wilson of the way in which this theory is thought to outwork in human societies. They use the hunter in hunter-gatherer societies as an instance of group selected 'altruism' for the hunter acts, at personal cost, to acquire food which is then shared equally among the whole community (Sober & Wilson 1998: 142). As meat eating has physical benefits, the behaviour is said to improve the overall reproductive output of the group over other groups with fewer or no hunters, and so can only be established by group selection. This selection will be even more effective if it is reinforced or amplified by social norms that reward hunting, for instance by ascribing the hunter high social status, and that facilitate the fair distribution of food. In such a system, both the cost incurred by the hunter (termed the primary 'altruist') and the one who exercises time and energy in enforcing the reward and punishment system (the secondary 'altruist') are supported by group selection (Sober & Wilson 1998: 144-146). The latter is seemingly akin to the strong reciprocator proposed by Fehr and others who enforces rules of conduct such as generous giving and the fairness of equitable sharing (Section 5.5).

Yet, in accord with the sensitivity of the behaviours to the cost/benefit ratio, it is noted that not all members need to be 'sacrificially altruistic' hunters and, unlike Fehr, Sober and Wilson notably do not consider that the cost incurred by the secondary 'altruists' need be substantial, it may be little or almost nothing at all. One example of this type of low-cost enforcement is the effectiveness of gossip in curtailing some behaviours and increasing others (Sober & Wilson 1998: 167-168).[168] Moreover, as Sober and Wilson

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[167] The evolution of human behaviours by group selection is supported by Pagel and Mace in an article in *Nature (*Pagel & Mace 2004: 277-278) and by Christopher Boehm. The latter sees it as an explanator of the egalitarian nature of communities during the Upper Palaeolithic time period where game sharing and the care for the incapacitated were common (Boehm 2000: 211-215).

[168] This minimisation of cost is similar to the explanation of strong reciprocating behaviour in terms of shunning (see footnote 151); notably shunning was seen as an individually

themselves note, it could be argued that, as long as the primary and secondary behaviours emerged at the same time, the primary hunter's behaviour need not be reproductively (and thereby, genetically) 'altruistic' at all (Sober & Wilson 1998: 142, 145). The phenotypic 'altruism' expressed in the risky behaviour and potentially short life-span of the hunter may be compensated for by the increased access to females on account of his social status such that he is be able to father a higher-than-average number of children. If this were so then there need not be any reproductive cost, but rather a benefit, a situation for which the explanation of individual selection leading to reproductive gains is seemingly a simpler explanation.

Although Sober and Wilson continue to consider the two behaviours, that of enforcer and hunter, as being effected through group selection, this example, the most developed in Sober and Wilson's work, is not entirely persuasive. Not only are the phenotypic and genetic costs potentially negligible to the secondary 'altruist', a strong case can be given for the individual reproductive *gains* of the primary 'altruist' relative to others in the hunter's group.[169] It may be that Sober and Wilson could have chosen a better example, and that Fehr and others, who emphasise the very real cost of strong reciprocators (secondary 'altruists'), give a more compelling case. Certainly, it would seem that individuals do act at significant material cost in rewarding and punishing (Section 5.5). What is not clear, however, is whether group selection can account for such substantial losses for again, the cost/benefit requirements in this selection theory, as Sober and Wilson have plainly delineated, are such that it cannot accommodate losses that are too costly. In such a case, the 'altruists' would be easily displaced by 'selfish' types. Thus, while the example cited by Sober and Wilson involves losses that tend to be too minimal to give any strong indication of group selected 'altruism', the one referred to by Fehr is potentially too high.

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selected behaviour.

[169] Although sociobiologists would see this as genetically 'selfish', the point has been made above that having progeny is as 'altruistic' as it is 'selfish' in genetic terms.

In fact, if the applicability of group theory to nature is questionable (Section 6.2), then this is arguably even more so in the attempts at formulating group selected 'altruism' in human societies. Sober and Wilson, and others like Boyd and Richerson, rightly acknowledge that human behaviour and culture are too complex to be derived from the genes. Nevertheless, they take the memetic approach, which assumes that behaviour, and its derivative beliefs, are subject to a natural selection process akin to the genetic one. In this case, it requires that the behaviour and beliefs for group selected 'altruism' are established by their replication in human minds in a parallel way and under the same stringent conditions as the gene-based perpetuation of the trait – and that the effect is increased group reproduction. There are, of course, beliefs and behaviours in human societies that encourage reproduction (there are also others, such as family planning and celibacy, that do the converse). Yet, it is surely one thing to say that some behaviours and ideas benefit group reproduction, and another to say that they are sustained because of natural selection and their fulfilment of the many criteria of group theory.[170]

Moreover, humans can choose from among many behaviours and beliefs, some which they may knowingly be aware are counter to issues of reproductive interests. In fact, it is because humans have the capacity for intentionality and high-level reasoning that memetic theory, upon which Sober and Wilson rely, was considered unsound in Section 3.3. Humans express a purposefulness and capacity for reflection and evaluation that discounts memetic theory, the fundamental premise in human group selection. The point should also not be missed that although Sober and Wilson take the view that memes are correlated with reproductive benefits (Sober & Wilson 1998: 153), key proponents of memetics, those like Dawkins and Blackmore, have instead tended to see memes as being sustained

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[170] Both the UK's state welfare system and the Catholic Church's emphasis on reproduction possibly encourage group (national/church member) reproduction but surely need not be linked to the complex criteria of group selection for an explanation. Both would give reasoned arguments based on complex ideological views. In fact, it is the matter of human reason that makes this memetic explanation entirely dubious.

because of the fitness of the meme in replicating itself, and not necessarily due to reproductive effects (see Section 3.3). Further, even if memetics was tenable, the language applied to memes is normally that they are 'infesting' and 'exploitative' replicators – this would make group 'altruism' simply another 'infecting' meme. This hardly commends it as making a positive contribution to human benevolence.

In fact, it is worth considering the psychological implications of group selection theory. These are not immediately apparent as Sober and Wilson's primary interest is to present a case for phenotypic and genetic 'altruism' emerging in human societies, and not the group selected evolution of psychological dispositions.[171] Nevertheless, Sober and Wilson do tentatively suggest that group selection may effect the cultural belief that desiring the well-being of group members is a right and proper goal (Sober & Wilson 1998: 326-327). When this belief is assimilated into the human psyche, it can take the form of a benevolent concern for others in the group. However, because of the requirement for relatively low costs in this 'altruism', as well as the continued innate selfishness (due to individual selection)[172], it is hard to see how this can ever amount to a psychological altruism. There is another necessary ambivalence in this group selected 'altruism' that is entirely unavoidable. The care must be expressed *only within the group* in order for it to be effective in maintaining inter-group selection pressure and thus, the continued existence of the benevolence itself. How truly beneficent is a care whose very existence requires such a demarcation? In fact, group selection not only involves the delimiting of benevolence to the group, but also facilitates its corollary of inter-group rivalry. Sober and Wilson are themselves at pains in their text to stress that theirs is not an argument for universal

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[171] While their work argues at some length for the possible evolution of human psychological altruism in the parental care of progeny, they do this on the basis of individual selection theory, and not that of group selection (Sober & Wilson 1998: 301f). Notably, they do not take into consideration the natural selection limit for such care, namely, that it must be directed toward a maximal, viable young.

[172] As was noted previously, group theorists see group selection as co-existing with individual selection, and as such even within the group they expect that psychological selfishness (the commitment to one's own reproductive-replicative interests) albeit somewhat constrained by group selection, will necessarily persist.

niceness (Sober & Wilson 1998: 8-9). As they note:

> Group selection does provide a setting in which helping behaviour directed at members of one's own group can evolve; however, it equally provides a context in which hurting individuals in other groups can be selectively advantageous. Group selection favours within-group *niceness* and between-group *nastiness.*[173] (Sober & Wilson 1998: 9)

Indeed, Sober and Wilson cite in support of their group theory the various indigenous communities where members are required to "behave benevolently towards fellow group members" but where such "constraints are rarely present with respect to outsiders" (Sober & Wilson 2000a: 195). Continual feuds between neighbouring groups, that at times erupt into direct warfare, are to be expected (Sober & Wilson 1998: 174). It is perhaps because of the implications of group selection for endorsing the naturalness of group hostilities that Sober and Wilson, along with other authors who support group theory, are also keen to point out that whilst warfare is one way in which one group may outcompete another, it is not the only way. The process may be passive, such as when one group is more economically successful than another (Sober & Wilson 2000a: 194; 1998: 174). In this case, it is always possible for the outcompeted groups to adopt the cultural practices of the more successful group (Laland, Odling-Smee & Feldman 2000: 222). Even with groups conquered by war, the inter-group brutality need not lead to the death of the defeated individuals who may either join the dominating group, willingly or under duress, or flee to neighbouring groups; the consequence is not usually extinction (Richerson, Boyd & Henrich 2003: 369).[174]

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[173] Italics are my own.

[174] As these authors point out, this movement of people between groups clearly undermines any strong genetic basis to the cultural features of a group as "many of the defeated survive and because they would tend to carry their unsuccessful genes into successful groups" the effect would be a "rapidly running down [of the] variations between groups" (Richerson, Boyd & Henrich 2003: 369).

Despite their efforts to minimise the implications of group theory, it can, of course, easily be interpreted as legitimising inter-group war and conflict. Even if the rivalry is passive, such as one group's economic success over another, working for equality between groups is clearly not an option as this would dissipate the selection differential between them, and presumably lead to the loss of the traits that generated the group's own economic success. So, even if inter-group rivalry is not outwardly hostile or destructive of human lives, inter-group competition seemingly would not allow the active sharing of material resources or cultural practices by the more successful group. There may not be any overt inter-group rivalry but there also cannot be any expressed inter-group care, either by individuals or by the group as a whole. In response to this aspect of group theory, Iver Mysterud raises the very worrying spectre of inter-group "ugliness" increasing in the future as ecological resources are depleted (Mysterud 2000: 226). Interestingly, Sober and Wilson suggest group selection as a potential solution. They say that although group selection is not a universal morality as its boundary of niceness is the group: "Without being naively optimistic, we think it is theoretically possible for moral circles to be stretched even wider" (Sober & Wilson 2000b: 264). This very qualified and subdued note of hope is not supported by any explanation of how this might occur under natural selection. One can only conjecture that this could be so if the human community was set against other species – an intra-group human niceness supported by inter-species rivalry. If this is what Sober and Wilson have in mind, then it is a dismal hope, if indeed, hope is the right word for such a scenario.

Yet, this critique of group theory should not be seen as inferring that humans do not associate in groups or that there are no resulting feuds, whether this is between indigenous communities, nation states, religious groups, political parties or scientific laboratories. Nonetheless, the likely explanation for this phenomenon is surely that people simply form closer attachments to those with whom they are more familiar, whether this is through a shared cultural background, workplace and/or ideals. It is for personal reasons that are not related to selection and reproductive outcomes.[175] Moreover, the role of ideology, one's beliefs and values, is surely important in forging the unity within a group and the relationships to outsiders through its effect upon empathy. Ideology establishes those to whom we extend empathy and those whom we exclude. One extreme example is the case of Nazi Germany where it was found that the perpetrators of atrocities were not psychopaths but often ordinary men who showed caring sensitivity to their families, friends and compatriots.[176] Empathy was clearly present in their lives but it was just not extended to certain peoples, particularly the Jews. It had been constrained in some of that particular German generation, arguably by choice and the persuasion of the surrounding ideology, and then reinforced by habit.[177] The same phenomenon can be seen in the ideologies used to support the white populations in Southern America and South Africa in their justifications of abuses and enslavement of black people.[178]

Yet, just as empathy can be delimited to one's group through ideology, it can also be expanded to non-group affiliates. Consider a group like Oxfam or Christian Aid whose purpose for association is to benefit others, by far the majority of whom are outside of its membership; and not just beyond its organisational membership, but also ethnic, national, economic and class groupings. Here, empathy and the sense of others as subjective persons has seemingly orientated humans toward a care that transcends group bounds and in fact, groups like Oxfam exist simply for the care of these non-members. Thus, while humans form groups, this is for personal reasons, and ideology (not natural selection) is important in defining the attributes of these groups. In fact, contrary to group theory's expectation of intra-group niceness and inter-group apathy/hostility, some groups have inter-group care as their chief characteristic.

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[175] Group feuds may, of course, be founded on desires to achieve certain egoistic goals.

[176] This is noted by Patricia Williams (2001b: 567f).

[177] Notably the rapid historical rise and fall of this ideology makes its explanation in terms of group reproductive outcomes unrealistic.

[178] This point is noted by Richerson, Boyd and Henrich (2003: 376, 371) and Fessler and Haley (2003: 28).

6.4 Conclusion

This chapter has considered the recent arguments put forward by Sober and Wilson for the emergence of forms of 'altruism' in nature and in human communities by group selection. It has highlighted both the theoretic plausibility of the gene-based form of this 'altruism' in nature and the many conditions required for its occurrence which must temper the likelihood of its actually happening. With regard to their advocating of a meme-based parallel process taking place within human culture, this chapter has argued that the matter is unsupportable. It necessarily involves the same rather complex criteria that constitute the genetic equivalent process, and more importantly, it presumes that cultural behaviours and beliefs are subject to natural selection – a point that was countered in Chapter 3. Moreover, this group selection is hardly a firm foundation for a universal morality that cares for all, for any 'altruism' is restricted as it must effect benefits in reproductive terms, and this, not just for others, but for the 'altruist' also.

This delimiting is also inevitably an aspect of any psychological benevolence that comes from group selection. At the very least, the theory requires that such care be kept within the bounds of the group. As the theory rests on the presumption of group competition, it also implies a naturalness to group hostilities and war. Indeed, the morality stemming from group selection is not seen by its advocates as a reversal of sociobiological selfishness, but is simply the addition of another level. To the promoting of the individual's own reproductive-replicative interests over that of other individuals, is added the promoting of the group's reproductive interests over that of other groups – a form of institutional selfishness.[179] In contrast to group theory, it has been pointed out that although humans do form groups, this is not because of the effects of natural selection upon culture. Humans simply associate and bond more closely to those they know and with whom they share common interests. Whether these groups are rivalrous or otherwise depends on the

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[179] This is, of course, to use the sociobiological meaning that is given to selfishness.

particular ideological beliefs and values that inform the group. Indeed, the very capacities that allow humans to care for their young, the other-centred orientations of empathy and subjective awareness, also allow humans to show care for those outside of their group. Ideology too, has the potential, through the delimiting of empathy, to produce hostility toward non-group members. Whilst these features are not determined by natural selection, it is possible, of course, for an individual who is thoroughly convinced of the relevance of group theory to humans, to exhibit a differentiation between group and non-group members in the manner expected in group selection.

Chapter 7: Sociobiology and Christianity in Discourse on Altruism in the New Testament

7.1 Introduction

The purpose of this chapter is to outline the sociobiological interpretation of Christian love in the NT, and the response to this sociobiological view from two foremost Christian thinkers in this area, Stephen Pope and Patricia Williams. Yet, the chapter is by no means simply one of review for a critique will be proffered of the views described – one that will stem primarily from the insights into human nature and benevolence generated in the prior chapters of this thesis. Some anticipatory comments will also be given from the ideas about NT love that will be more properly developed in the next chapters (8-10). Indeed, both the delineation of the discourse and its critique in this chapter are important because they set the context for these subsequent chapters by showing the way in which the two disciplines have already engaged in dialogue on the subject of love in the NT.

In Section 7.2, the sociobiological explanations of the NT teachings on care for others will be assessed, and as this section will demonstrate, sociobiologists understand such texts as in keeping with the biological forms of 'altruism'. The biblical teachings are directed at the care of family relatives, reciprocal partners, group members and, above all, the self (specifically, her/his own reproductive interests). As the critique in this section will indicate this delimitation is not fitting, as the very instances cited defy explanation entirely in terms of the sociobiological descriptions of care. In Section 7.3.1, the discussion will consider Stephen Pope's correlation of sociobiological views with the NT texts on love. While Pope argues for the human capacity for a genuine (psychological) altruism, nonetheless, he views Sociobiology as being instructive in defining those to whom such care is bound. Thus, he sees human nature as having an innate propensity to care for the self and then kin, reciprocators and group affiliates, and he considers that these priorities are largely reflected within the moral injunctions of the NT. While Williams also accepts the sociobiological interpretation of human benevolence, as Section 7.3.2 will demonstrate, she sees it very differently as defining the evil and sinfulness which is innate within human nature, the original sin which biases expressions of 'altruism' so that they serve reproductive-replicative ends. In her view, the NT teachings are directed against such innate propensities and prescribe a love that contrasts with the sociobiological categories of kin, reciprocals and the group. In both of these sections, the contributions that these writers make to the dialogue with Sociobiology on the texts will be noted, along with their shortcomings.

7.2 An Analysis of the Sociobiological Interpretation of Altruism in the New Testament

The sociobiological vision, as the preceding chapters have shown, is that the discipline forms a comprehensive and authoritative paradigm, one that is suffice to account for all of human nature, including human benevolence, and the culturally held ideals and beliefs that serve to guide behaviour. It is not surprising then, that the NT precepts with regard to caring for others are seen by sociobiologists as necessarily constrained to the categories of kin, reciprocal partners and group members. The 'altruism'[180] derived from these texts is selective in its beneficence in the same way and for the same reason that it is in all other forms of human culture and biological nature, that is, for matters of individual reproductive and replicative fitness. The prior chapters of this thesis have, in some respects, already set out the response to this sociobiological claim for they have shown that the discipline provides neither a comprehensive rendering of human culture (Chapter 3), nor of human benevolence (Chapters 4-6). As such, there is no necessary expectation that it will be able to explain all of the teachings on beneficence in the NT. Indeed, this section will indicate just such a paucity in the sociobiological renderings.

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[180] 'Altruism' will continue to remain in quotations in this section as its intended meaning by sociobiologists is not that of psychological altruism (see Section 1.2).

In his recent book *The God Delusion*, Richard Dawkins argues that the prime characteristic of both the Old Testament (OT) precepts and Jesus' own teachings is an in-group 'altruism' (e.g. Dawkins 2006: 253) [181]; a view also taken by Mysterud[182]. According to Dawkins, both Jesus and the OT God are deeply "racist" in their preferential treatment of the ethnic group of the Jews (Dawkins 2006: 253, 31).[183] He considers that Jesus never intended to teach a universal love for all and his mandate to love one's neighbour simply meant to love another Jew (Dawkins 2006: 253). David Wilson, in *Darwin's Cathedral*, also sets out an argument for the Christian faith as being maintained by group selection, this time not around a single ethnic group, but around the community of the church as both a global entity and a local congregation. He sees the NT precepts as encouraging strong internal loyalties and care which make the believers cohere into a single adaptive unit, whilst simultaneously demanding their separation from the rest of society (Wilson 2002: 208f, 10, 46) – there is "in-group morality and out-group hostility" (Wilson 2002: 10). The effect of this teaching on in-group bonding is said to be seen in the life of those like Mother Teresa. So, E. O. Wilson in his reflection on Teresa says: "Virtually identical formulations, equally pure in tone and perfect with respect to in group altruism, have been urged by seers of every major religion" (Wilson 2001: 159). Such self-sacrificing devotees through consecrating their lives and performing charitable deeds, improve the darwinian fitness of their group – this is "the ultimate if unrecognised beneficiary" (Wilson 2000: 561). Thus, Mother

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181 In this book, Dawkins more generally denounces the Christian faith and its adherents as immoral. Much of his criticism is levelled specifically against the OT, such as his view that the portrayal of God in these texts is of a "psychotic delinquent" (Dawkins 2006: 38) – this issue, which is beyond the scope of this thesis (as its focus is upon the NT), is taken up by Andrew Wilson (2007a: 82-84; 2007b). Dawkins also tentatively suggests that people who believe in God have generally lower IQs (than atheists) and are consequently more likely to perform criminal acts (Dawkins 2006: 100-103, 229) – points which remain to be proven. The remainder of his critique rests upon memetic theory (for instance, his view that beliefs about God and other religious ideas are mind 'viruses'), which has been argued against in Section 3.3.

182 Iver Mysterud sees the OT laws as both encouraging in-group 'altruism' within the Hebrew community (as well as their direct reproduction) and fostering out-group competition (Mysterud 2000: 226).

183 He sees this as the immorality of the biblical perspective, which he contrasts to his own view of a wider, universal care. The inherent difficulties with Dawkins' own version of human benevolence have been noted in Section 3.3.

Teresa is assured by her behaviour of the perpetuation of her "Church's immortality" (Wilson 2001: 165).

These views, of course, assume that Sociobiology can provide an account of group selected human 'altruism' – a perspective that was countered in Chapter 6. It was shown here that both the complexity of selection at this level (its stringent criteria), and the inherent problems associated with memetic theory, on which this selection depends, make it untenable. So, even if the NT texts are effecting benefits to the church, this behaviour cannot be explained by sociobiologists. It is beyond their descriptive capacity and must presumably require some purely cultural explanation. Quite apart from these difficulties with group theory, as Alister and Joanna McGrath have observed in their response specifically to Dawkins, Jesus was welcoming of those like the Samaritans, prostitutes and taxpayers – the former of whom belonged to the out-group of ethnic Judaism, and the latter of whom were outcasts of its social and religious community (McGrath & McGrath 2007: 54). In fact, they note Jesus' particular concern to be inclusive of such outsiders, both in his teachings and in his own life and ministry (McGrath & McGrath 2007: 55).[184]

Even in the example of Mother Teresa, it is not the church per se that has benefited reproductively from her behaviour, but the many Indian children from poor backgrounds whom she has caused to survive and reach mature reproductive age (Rolston 1999: 317). She has benefited not just non-kin and non-reciprocators, but those outside of her membership group. The sociobiological rejoinder to this could perhaps be that these children were themselves more likely to become Catholics and so, by their conversion and consequent reproduction, are potential contributors to the overall

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[184] Dawkins' view that Jesus was only concerned for Jews, must necessarily reject as authentic the sayings of Jesus at the end of the gospels in which he sends his followers out to make disciples of all nations (Mt: 28: 19-20; Mk. 13: 10; Lk. 24: 47), along with his teachings which envisaged all nations as being brought to God (e.g. Mt. 24: 14; 12: 17-2). This view also entirely discounts Paul's ministry to the Gentiles as being commissioned by Christ.

reproductive fitness of this group. The difficulty with this, in sociobiological terms, is that group 'altruism' must be strictly bounded to group members with no inclusion of outsiders. Teresa's benefiting of those who may or *may not* subsequently join her group would undermine this exclusivity criterion. This, of course, does not begin to address the psychological motivations that were part of Teresa's commitment to Calcutta's poor. In her writings, Teresa exhibited a profound compassion for the poor for whom she cared – she reminded the world that India's poor are born into a "world of inhumanity", of starvation and "dying endlessly", but are themselves humans for: "They laugh and cry, they're people just like you and me" (Mother Teresa & Devananda 1986: 43). Teresa expressed a deep empathy-altruism that defied the sociobiological limits of care, and so, if she were inspired by the NT texts, then one would have to say that this resulted in a benevolence that transcended sociobiological limits both in its inclusion of non-group members and in the psychological altruism that characterised her love. In fact, given Jesus' own example in the NT of compassion for those excluded, it is perhaps not so surprising that Teresa felt bound by her Christian faith to also care for these marginalised people. Thus, whilst the nature of NT love and its relation to those outside of the church community must await further discussion (Sections 8.2-8.4, 9.3 and 10.3), already there are indications here that the limited construal of group theory is not appropriate.

Other sociobiologists have attended to what they see as the reciprocal nature of the teachings in the gospels. One such teaching is the so-called Golden Rule of: *"In everything do to others as you would have them do to you"* (Mt. 7: 12).[185] According to sociobiologists, this rule is directed at establishing reciprocation where benevolence is extended toward others in order to ensure a returned benefit (Axelrod 1990: 136; see also Trivers 2002c: 44; Barash 1982: 115; discussed by Ebbesen 2002: 22f). The rule instructs a treatment of others that induces a reciprocated response. As Barash says of such reciprocity, it is 'selfish' as it "serves ultimately to increase personal

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[185] All biblical references are taken from the New Revised Standard Version, 1995, and these are demarcated by being given in italics.

fitness" (Barash 1982: 115). Ruse makes a very similar assessment of the commandment to *"love your neighbour as yourself"* (Mt. 22: 39). Such care is intended to facilitate reciprocation, which is why, in his view, it is to be understood as largely restrained to one's circle of close intimates (Ruse 1994: 17; 2000: 310-312; 2001: 200-201). As others have noted of Ruse, his interpretation of loving your neighbour is decidedly a matter of acting in the self's own interests (Sagan & Margulis 1995: 49).

If one were to accept the sociobiological interpretation of these biblical texts, one might say, at the very least, that these teachings seemingly stress some form of equality in reciprocation – giving as much as one hopes to get. As such, they were directed at encouraging fairness in the exchanges of kindnesses and generosity over and against the pervasive cheating and deception that sociobiologists themselves consider innately characterise reciprocal relations (Section 5.4). They are a step up from the subterfuge of deception and dishonesty. This would, of course, still fall short of the human propensities presented in Sections 5.4 and 5.5, where it was argued that humans tend to accept reciprocal terms only in economic contexts where goods are exchanged, and not in the personal contexts where the care of individuals is involved (as is evidently the case in these teachings). Yet, even this very limited conception of the biblical teachings would not be in keeping with the sociobiological rendering; for with regard to the command to love one's neighbour, sociobiologists have added precisely these elements of deception and cheating. In the sociobiological view, Jesus' parable of the Good Samaritan, in which he defines who is one's neighbour (Lk. 10: 30f), is to be understood entirely in terms of reputation building and potential self-deception. The Samaritan was an example of someone who established himself as an 'altruist' by performing acts of beneficence that would be known publicly and would have resulted in others being impressed and giving to the 'altruist'. Alexander says of such altruism, the "main reward is reputation, and all the benefits that high moral reputation may yield" (Alexander 1993: 188). It may not be that Jesus himself and the do-gooders whom he inspired will be aware of their ultimately reproductive-replicative motives but this is only because they are self-deceived. So, Alexander concludes: "This means that whether or not we know it when we speak favourably to our children about Good Samaritanism, we are telling them about a behaviour that has a strong likelihood of being reproductively profitable" (Alexander 1987: 102).[186]

In fact, as will be argued in Section 10.2, sociobiologists have failed to understand Jesus' meaning in these teachings. They are not self-directed maxims and stories aimed at expected returns but are intended to direct the hearers to recognising how they themselves would want to be treated. This should be the standard by which they treat others, regardless of how these others treat them in return. They were about an identification with others, an empathy for others in which they are seen as beings having experiences much like the hearer's own. As will be noted in Section 10.2, even the matter of appearing 'altruistic' by giving generously in public so as to gain a reputation is directly addressed by Jesus and it is rejected as a permissible motivation for the believer. Indeed, Ruse in his engagement with the NT texts, acknowledges some awareness that these teachings of Jesus do not fit so easily into a reciprocal interpretation. He recognises that Jesus himself applied the command to love your neighbour in its very expansive form of the love for one's enemy (Ruse 2000: 311-312). This is hardly in keeping with reciprocal interests for the enemy is not someone who would want to benefit the individual in mutual exchanges, but rather the converse, the enemy is often one who actively seeks the individual's harm (discussed further in Section 10.3). Ruse is clear that such an understanding of the love command, one which includes the enemy, is a "radical" or "strong altruism" which, as he says, is "no friend" of Sociobiology (Ruse 2002: 161).[187] He

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[186] Alcock similarly interprets Mother Teresa's behaviour as having gained "hidden benefits" in the indirect reciprocal gains that stemmed from her reputation as an 'altruist' (Alcock 2001: 180-181). Yet, given Teresa's very simple lifestyle, along with her celibacy, it is hard to see where any material or reproductive gains were accrued to her through her behaviour.

[187] Interestingly, Ruse considers the example of the Western care for African children who are in poverty, and he suggests that this might rightly be an appropriate interpretation of the love of neighbour command (Ruse 2000: 310-311). Whilst this sounds like a rather expansive understanding of the command, the only reason Ruse specifically gives for

suggests that such an extreme and literal understanding of Jesus' teachings is unnecessary for the Christian community should recognise that Jesus was a preacher, and that preachers often exaggerate upon their topics (Ruse 2000: 311-312; 2002: 162). By advocating a "strong altruism", Jesus was drawing his hearers away from excessive self-interest and toward its more enlightenment form of reciprocal cooperation (Ruse 2001: 201-202). In response to Ruse, although Jesus clearly did use hyperbole on occasions,[188] as an exploration of the biblical teachings in Chapters 9-10 will argue, this delimiting of his teachings is not acceptable. Certainly, it is not the way that biblical scholars who have worked closely with the texts have understood them.

Ruse is also keen to emphasise the way in which the NT endorses family life and the care for kin (Ruse 1994: 15; 2001: 311-312). He says of its teachings: "One's obligation is to be a good family man" (Ruse 1994: 15). Such care for one's genetic relatives is seen as consistent with the sociobiological principle of kin 'altruism' (Ruse 2001: 311-312, 202-203). Indeed, there are numerous examples of the import of loving family relationships within the NT (discussed in Section 9.2). It should be noted, as was argued in Chapter 4, that parental care for offspring and possibly relationships between siblings are biologically based, but that they need not be given the 'selfish' descriptor that is often ascribed to them by sociobiologists. It is the place where the capacity for genuine psychological altruism has emerged in humans and is essential for the maintaining of the species. The fact that the NT supports and encourages such care is surely a point in its favour. The problem is, therefore, not whether such care is mandated, but whether care is constrained to kin (along with reciprocators and the group). Ruse is himself aware of the way in which Jesus' teachings transcend family obligations in texts like Mt. 12: 48-50 where he states that

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such care is that global travel means that Westerners are exposed to their diseases (Ruse 2000: 310-311). Those like Garrett Hardin are more phlegmatic about this care for the distal and non-reciprocating poor, and he says instead: "The greatest gift we can give them is the knowledge that they are on their own" (cited Grant 2001: 103).

[188] See, for example, Lk. 6: 41.

his followers, rather than his biological family, are his *"brother and sister and mother"* (Ruse 2000: 311-312). Again, Ruse suggests that such extremes of biblical teaching should be moderated and not taken literally (Ruse 2000: 311-312). Yet, as Section 9.2 will show, this literal interpretation is unavoidable.

Finally, it should be noted that in keeping with the sociobiological focus upon the individual's own reproductive fitness, sociobiologists have also been keen to point out the ways in which religious texts like the NT serve directly to support an individual's reproduction over and against any 'altruism'. So, Ruse says "by and large, they [religions] have been pretty careful to promote reproduction – often lots of it" (Ruse 1986: 178; also Wilson 2000: 562). Certainly, there are texts that encourage reproduction[189], but, again, these only become problematic if one accepts the sociobiological view of reproduction as intrinsically 'selfish'. This is not necessary as Sections 2.3.1, 4.3 and 4.5 have heeded the elements of 'sacrifice' and 'other-directedness'[190] entailed in the reproductive process. Rather, the matter is surely that of the relationship between the pursuit of the self's interests (and not just reproductive interests but material, spiritual etc.) and that of others. How does the NT interpret the commitment to the self relative to the care of others? The above discussion already suggests that the NT requires significant attention to be given to others and indeed, as Chapter 8 will contend, the priority is upon the other over the self. In conclusion, whilst sociobiologists have evidently striven to constrain the NT texts within the boundaries of their discipline, this brief critique of their view has indicated that the texts do not warrant this delimitation. The sections that now follow will explore this relationship of Sociobiology to issues of benevolence in the NT through the writings of Stephen Pope and Patricia Williams.

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[189] Passages like 1 Tim. 4: 3 and Mt. 19: 1-6 endorse the marital relationship and those like Mt. 7: 11 and 2 Cor. 12: 14 presume that parents will care for their children.

[190] Notably, whereas sociobiologists see the reproductive process as only incidentally supporting the overall perpetuation of the species, the ancient text of Gen. 1 depicts this as its very purpose – *"Be fruitful and multiply, and fill the earth"* (Gen. 1: 28, also 22).

7.3 A Critical Consideration of Two Christian Perspectives on Sociobiology and Altruism in the New Testament

7.3.1 Stephen Pope: Sociobiology and the Ordering of Love

In his writings, Stephen Pope sees Sociobiology as presenting a natural "ordering of love"[191]. He considers that there is a human innate preference for kin that has evolved on account of evolutionary (reproductive-replicative) advantage. He says, humans "have a general disposition to care for relatives more than non-relatives and for close kin more than for more remote kin" (Pope 1998: 285). He notes that the parent-offspring bond is one that has been effected by natural selection as it is essential for the child's well-being and development, and therefore for the parent's own reproductive fitness (Pope 1994: 133). Yet, Pope also contends for the limits of the paradigm with regard to these kin proclivities, for as he observes, human parents tend to care for their children beyond what would be expected by reproductive fitness outcomes (Pope 1998: 284). Over and against the rivalry and competition which sociobiologists stress as characteristic of family life, Pope notes that the family is also a place in which honesty, empathy and compassion are exhibited and inculcated in children (Pope 1998: 289). This is not to say that rivalries do not occur, but that, as Pope rightly says, humans can be motivated by a full (psychological) altruism (Pope 1994: 110f). Whilst these particular views concur with those proposed in this thesis (Sections 4.5 and 4.6), this is not the case for Pope's acceptance of the sociobiological view of an innate preference for kin outside of the nuclear family (Pope 1998: 285). In contrast, this research has contended that such a biological based bond, if present at all, is very weak and is forged primarily by cultural and personal factors (Section 4.4). So, although Pope rightly attenuates aspects of the sociobiological construal of kin 'altruism', paying heed to the human capacity for psychological altruism in these relationships, his revision does not go far enough – a situation which is also the case in his appropriation of the other sociobiological categories of relationship.

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[191] This phrase is itself derived from Thomas Aquinas (see footnote 193).

Pope contends that, in accord with Sociobiology, humans are also bound by natural inclinations to reciprocation, that is, to "care more for those who reciprocate than for those who do not, the 'cheats'" (Pope 1998: 285). Yet, he does not conceive of this reciprocation as necessarily bound to the strict self-interested terms given to it by sociobiologists. Pope's repeated example of reciprocation is that of friendship which he says tends to involve a genuine care for another for her/his own sake even though this relationship has been formed reciprocally through the sense of gratitude for past assistance. It is reciprocal but in a more caring sense than is often meant by sociobiologists (e.g. Pope 1994: 118-119). Indeed, the biologist Joan Silk's own recent analysis of friendship in the light of Sociobiology indicates that it does go beyond the tracked accounting of the give and take that is the basis of the sociobiological definition of Tit for Tat reciprocation (Silk 2003: 37-54) – it is far more generous than reciprocal criteria would expect. Again, Pope is right in bringing attention to the altruistic element in this relationship, just as he did with kin relations. Nonetheless, it may be that, again, he does not go far enough – for it is possible that what appears as reciprocation in friendship is rather an equity which is striven for not out of a concern for returns but to avoid a paternalism where one or the other is made to feel incapable of expressing an equally caring regard. It is an avoidance of the differentiation of the friendship into superiors and inferiors. If so, then this relationship is more distal from reciprocal theory than Pope allows. Such relationships can, of course, also be motivated largely by self-benefit, although they would probably be difficult to sustain precisely because of the expectation of psychological altruism – any self-directed motivation would be seen as a breaking of the friendship tie. Pope probably cedes too much to the encompassing breadth of Sociobiology by including this relationship within reciprocal bounds. Instead, as Chapter 5 has argued, reciprocation is best constrained to defining economic relationships and even here, of course, humans show a capacity for acting more altruistically than the bounds of returns.

With regard to group theory, Pope accepts the sociobiological category of the group and says consequently, that there is an inherent inclination for humans to form group affiliations, and biases against those outside the group – humans naturally divide the world into those who belong and those who don't (e.g. Pope 1994: 138). The point made in Chapter 6 was, of course, that whilst internal group intimacy and out-group hostility are seen in human societies, this cannot be accounted for by sociobiological theory. Although Pope is right in identifying this human behaviour, he is incorrect in his assumption that these behaviours are validated by the science. Instead, as was suggested in Section 6.3, ideological values, and not biology, determine the relation of individuals to group members and non-group members. Pope's acceptance of group theory as genetically inscribed, with its assumed inevitability of internal loyalty and external rivalry, occludes this role of ideology.

In accord with Sociobiology's emphasis on the self, Pope accedes to an innate self-regard although he indicates that there should be a differentiation between a proclivity to self-love and its inordinate expression in egoism (Pope 1994: 109f). This view coheres with that previously proposed in Section 4.5 where it was argued that humans have hedonistic senses that make them aware of their needs and desires, and which cause them to naturally express a care for themselves, but which can become excessive in egoism. Self-love and self-centred egoism are both possible but they are not the same thing. Yet, Pope's own emphasis on the priority of self-love, as the discussion below will indicate, becomes, at the very least, very close to egoism. Indeed, it is to a critique of Pope's ordering of these relationships, and their relation to the NT precepts, that this discussion now turns.

According to Pope, among the human capacities for caring, self-love should be pre-eminent – he sees this self-regard as having a natural priority over loving the other (Pope 1994: 59-60, 128). Indeed, on the basis of his attenuated form of Sociobiology, he argues for an ordering of human relationships in which preference is given to the self, then to kin, reciprocators (friends) and those who constitute the inner group (Pope 1994: 1-3, 129-133; 1998: 288-289). So, he says:

> Behavioural biology gives a natural explanation of the deeply partial character of human love, the fact that human beings naturally love some people more than others and that their affectionate bonds are particular and cannot be extended to encompass all human beings. (Pope 1994: 128)

He considers that Sociobiology is instructive in drawing out the natural limits to human affection and that these must be recognised within the Christian perspective for: "Moral imperatives should not require what is impossible to human agents" (Pope 1994: 132). The human innate propensities must be taken into account and he rejects the view that humans should be bound to treat all others with equal love and regard.[192] There can be no "unlimited beneficence" or "promiscuous altruism" (e.g. Pope 1994: 132), and he is clear that his view is one which challenges directly the ideal of such a universal care (Pope 1994: 138). As further discussion will show, he sees his perspective as having precedent in the NT texts themselves. It is not that Pope denies completely the Christian commitment to a more expansive care, but rather that sociobiological priorities take such precedence in his ordering, that any wider benevolence is placed very much in the background.

Pope sees the proclivities for self, kin, reciprocators and in-group members as positively received within Scripture. He sees the love of self as indicated in Jesus' command to *"love your neighbour as yourself"* (Mt. 22: 39; Pope 1994: 60f). He refers to the text of 1 Tim. 5: 8 which requires of believers that they care for their relatives, especially those within the immediate family, as an

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[192] He sees this disinterested altruism as stemming primarily from writers such as Anders Nygren who defined the Christian love of agape as being initiated for, and entirely directed toward, the other (Nygren 1982: 75-76, 97f).

explicit biblical endorsement of the priority of kin (Pope 1994: 62). He acknowledges Jesus' rejection of the primacy of family ties in passages like Luke 14: 26 but suggests that here Jesus is repudiating the "disordering" of familial love in which it is excessive and placed as prior to the love of God (Pope 1994: 63, 143).[193] He says of Christ, that rather than him being the ideal of unconditional love, he bore the cross for those he called friends (taken from John 15: 15) and for his own within the kingdom, his in-group community (Pope 2002: 169, 173). It was "sacrifice within friendship; self-denial within the context of communal love and affirmation" (Pope 2002: 172). It was not an "uninhibited compassion" for all but a care for those within the bounds of reciprocal and group membership (Pope 2002: 169). So, he considers that these priorities are morally binding upon human individuals, and even the Church must make its priority the care of those within its community (Pope 2002: 172f).

Texts, such as those cited by Pope, will be discussed in Chapters 8-10 and it suffices to note here only a few points. It is evident in Pope's assessment that Christ expressed self-denial and radical self-giving, even if it was allegedly for those within his sociobiological circle. This is clearly not in keeping with that priority identified by Pope where self-love takes precedence over other-love. In fact, Pope's prioritising of self-love is very much suggestive of an egoism that is negated by the example of Christ and strongly denounced in the NT, as Chapter 8 will show. Further, even if one accepts friendship as a form of reciprocation, the context of the cross in the gospels is Jesus' betrayal and abandonment by his friends, and in the epistles, Paul speaks of Christ dying for all humanity while they were still enemies of God (and Christ) – see Rom. 5: 10. It is by no means clear that Christ's death was expressed as a commitment to mutual (reciprocal) friendship. With regard to kin relationships, there is a tensive mix within the NT which both recognises this familial commitment and yet also places it

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[193] Pope sees his interpretation of this text as reflecting Thomas Aquinas' own commentary (Pope 1994: 59f). In fact, he gives particular attention to the work of Aquinas in his book *The Evolution of Altruism and the Ordering of Love* (1994).

alongside many other priorities of care, including those to non-kin and non-reciprocal others (Chapters 9-10). With respect to the community of believers, the point will be developed in later chapters that this group exists not just for its members but as a missionary community which should have as its caring regard those outside of its membership also (Section 9.3). In fact, while Pope stresses the primacy of the sociobiological circle of intimates, he does not see this as entirely exclusive, but includes the necessity for a much wider regard for others.

Pope considers that Christian love must include both those indicated by the natural proclivities and those beyond them (Pope 1994: 134). He sees culture as playing an important role in the moral development process as humans use their capacity to choose in order to incorporate a wider set of others beyond that of one's innate affections (Pope 1998: 286; 1994: 130; 2002: 176-177). He obviously does not see culture as bound by natural selection as is the sociobiological view (see Chapter 3). In the Christian tradition, he sees this fuller form of love, which transcends biological ties, as fundamentally based on the belief that all humans are made in the image and likeness of God (Jas. 3: 9; Gen. 1: 26-27) – an inclusive openness to all which recognises the dignity of each as related to, and reflecting, the Deity (Pope 1994: 140; 2002: 178-180). He acknowledges that Christ himself exhibited a love for many others, including those non-reciprocators – the marginalised and oppressed. He considers that this wider commitment should also be displayed by the church (Pope 2002: 173, 179-180). As this knowledge is expressed and taken up in the church, this community "can be said to function as a 'socializing' agent expanding the circle of concern to include all human beings and all communities, regardless of genetic similarities, cultural ties, racial identity, and national allegiance" (Pope 1994: 140). So, the NT requires that believers extend the boundary of care to those that sociobiologists themselves would not allow (Pope 1994: 140-141).

Whilst in Pope's view, love evidently should extend beyond the sociobiologically defined limits, nonetheless, he places such a strong emphasis upon its categories of self, kin, reciprocators and group biases, that this wider love seems a rather meagre quality. The sense communicated in his writings is seemingly that in its actuality and practice the priorities of love are retained within the sociobiological circle (e.g. Pope 1994: 62). The NT may, to some degree, buffer the excesses of these innate tendencies and draw them out to a limited extent toward others, but it does no more than that. One of the problems with Pope's approach is that such sociobiological priorities do not properly accommodate for distinctions based on need. So, for instance, it may well be that for Western Christians, it is precisely the poor in distal countries, those who are non-relatives, non-reciprocators and non-group members, who should take precedence in care over the sociobiological circle of intimates who are in lesser need – this surely is the example set by Teresa and Christ himself (Section 7.2). The matter is whether the NT prescribes a bias toward one's own (such as kin), recognises the degree of need as a motivating factor, or does both.[194]

Further, while Pope's analysis of Sociobiology rightly identified the psychological altruism within sociobiologically defined relationships, he is unduly limiting of the human potential for wider benevolence. For although Pope recognises the human ability to express an empathetic sense, he seemingly constrains its expression to the sociobiological context of one's own family, friends and group. In contrast, it was argued in the previous chapters that this sense, along with the knowledge of the other as a subjective being, is not naturally bounded to kin, or to reciprocators and group members. Indeed, as was noted in Section 5.4, not only do these senses allow humans to express genuine concern for every human other, they may also facilitate a genuine caring regard for other species. Although Pope recognises the role of choice and NT values in mediating an expansive

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[194] The later chapters will contend that while there is general priority in the NT texts toward those in need (Section 10.2), the care of kin, especially young children, is also required (see Section 9.2). In fact, infants should also be seen as needy as they are very much dependant upon their parents' care – in which case, again, need is an important *criterion.*

altruism, his understanding of their role is different to the view taken in this thesis, because for Pope these values are seen as *contrary* to the human inclination. In contrast, it has been contended that, through empathy and the subjective sense, individuals naturally recognise and feel the need to respond in care to a wide range of others. As such, the expansive altruistic values of the NT are *continuous* with these innate abilities.

In conclusion, Pope is right in seeing humans as having an innate capacity to care for themselves, and naturally forming relationships with kin and reciprocal others – even though his oft-cited example of reciprocation in friendship is probably not appropriate. He also very helpfully highlights the degree of psychological altruism that is exhibited in these relationships, and is right in recognising that relationships such as kinship ties and love of the group (other believers) are generally positively received in the NT teachings. The difficulty with Pope's work is whether his orderings of love really reflect the overall meaning of NT precepts, as well as the human innate capacities. Certainly, his ordering does not take proper account of the reversion of self-love into egoism. He also does not accommodate the converse, namely, that humans have the natural ability to express care for others beyond the categories of kin, reciprocals and the group. As Chapters 8-10 will show, whilst the NT teachings uphold the love of self, kin and group members, it is equally cognisant of the human capacity for excessive self-regard, egoism, and the human ability to extend love to all others. Unlike Pope's rendering, this latter expansive (universal) altruism is not given in the NT as a remote ideal which is so displaced by the sociobiological categories as to be somewhat distal from real life, but as a very real call on the lives of believers.

7.3.2 Patricia Williams: Sociobiology and the Concept of Original Sin

Another well-known theologian who has engaged with Sociobiology is Patricia Williams. Much like Pope, she sees the discipline as having identified the human innate propensities as the primary drive to love the self and to a much lesser extent, to express a care for kin. She draws specifically on Hamilton's Rule as laying the basis for this priority of self over and against even the closest of kin (see Sections 4.2 and 4.6). So, whilst there will be some care for kin, it will be conflicted, containing elements of rivalry, as even with the nearest of relatives, siblings and progeny, the self shares only 50% replica genes (Williams 2000: 788-791). It is largely in terms of this primacy of self-interest and a secondary care for kin that Williams appropriates sociobiological insights. She says of humans that they are naturally bound to "love themselves completely and to love their nearest relative half as much" (Williams 2000: 809).

Whilst Williams' emphasis is upon kin 'altruism', she recognises that humans are also bound by natural selection to form reciprocal relationships, and, like Pope, she cites the example of friendship (Williams 1996: 257; 2000: 794). With regard to group formation, she considers that it is an extension of care for kin on the grounds that the group is either forged around the extended family (such as the clan), or comprises of a "fictive" family where symbolic markers such as race, uniform and/or manners constitute the uniting concept (Williams 2000: 791; 2001b: 568-569). She sees this as the basis of ethnic distinctions, one that establishes "who is *us* and who [is] *them*", and the subsequent grounds for ethnic rivalries and war (Williams 2000: 791). Whilst Williams' understanding of Sociobiology shares some elements in common with that of Pope, her construal of its meaning within the context of the NT is very different. For Williams has argued that Sociobiology provides an account, not of the ordering of love under the divine will, as in Pope's rendering, but of human sinfulness.

According to Williams, it is in the sociobiological categories, where self-concern is uppermost and caring regard is only then extended to family members, friends and wider kinship groups, that humans must be understood as naturally sinful. Indeed, a central precept in Williams' writings is that these innate human proclivities provide a scientific endorsement of the Christian concept of "original sin"[195] (Williams 1996: 257f; 1998: 557, 561). So, she says:

> People do love themselves and their relatives more than those in equal or greater need. It is this fact about humanity that strongly supports the existence of original sin, the sin inherent in human nature due to the action of natural selection, the sin of exclusive self-love leading to self-aggrandizement, nepotism, and greed; the sin of exclusive in-group pride, promoting out-group belittlement, deceit, racism, slavery, and genocide. (Williams 1996: 261)

Her vision of human nature is one largely characterised by egoism, nepotism and inevitable grouped kindred conflicts (e.g. Williams 1998: 561; 1996: 253f). She refers to the work of those like Ruse as presenting "solid grounds for believing an updated, evolutionary version of original sin" (Williams 1996: 261). In fact, Williams considers that Christianity need no longer refer to a historical beginning for sin in the Adam and Eve account, which she sees as having been disproved by the scientific explanation of human evolutionary origins, for Sociobiology has provided a new and true means by which sin can be understood as "natural and basic to humanity" (Williams 2000: 799f).[196] Sociobiology presents "a model of human nature to substitute for that in the Christian doctrines of original sin" (Williams 2001a: 201).

It is perhaps helpful at this point to reflect on Williams' view in the light of what has been said in the preceding sections of this thesis, including Pope's own analysis. Whilst Williams is surely right in identifying the deep problem of egocentrism in humankind, this ought not to be seen simply as an innate inevitability. The point was made in Chapter 4 that in all other species, the hedonistic drive that underlies the expression of egoism in humans, tends to

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[195] Williams' own definition of original sin is the Christian belief that "people are naturally disposed toward sin and naturally indisposed to obey God" (Williams 1996: 258).

[196] While this is somewhat moderated in her most recent work, *Doing without Adam and Eve: Sociobiology and Original Sin*, Williams continues to see nepotism, along with egoism and ethnic divides, as "dispositions that evolution encourages us to augment" (Williams 2001a: 187). The effect of natural selection is that humans are naturally driven in this direction.

be bounded by the genetic instincts to take only what is required for existence, and by self-expending in the producing and care of the most possible offspring (Section 4.5). Humans are egoistic in setting the hedonistic drive above and beyond even the reproductive one, but this is a state which Sociobiology itself cannot explain. Moreover, the expression of egoism in humans requires the diminishing of the equally natural human abilities of empathy and the subjective sense that direct humans toward caring for others. Egoism is not natural in the sense that it is entirely in keeping with the rest of biological existence, nor is it inevitable as humans have very developed senses that orientate them in the other direction, toward the care of others. Although Pope did not really accommodate the human capacity for egoism in his ordering of self-love, Williams' assumption that egoism is a sociobiological category is also a remiss.

Further, Williams' view that care for kin is a form of sin neglects the fact that these relationships can involve a genuine psychological altruism in humans[197] and that they have been essential in supporting goods beyond the individuals and their families, in the sustaining of species. It is also worth recalling here the potential problems with Hamilton's Rule on which Williams places a great deal of import. It is on this basis that she assumes that human care, like that of all other species, is proportional to genetic relatedness (Williams 2000: 807). As E. O. Wilson indicated this is not a full description of what is observed in the natural world where kin 'altruism' is sometimes beyond the expectations derived from genetic sharedness (Section 4.3). If the application of the Rule is limited in the context of other species, this is especially so for humans who are not bound by genetic constraints, and who can, and do, express a psychologically altruistic care for kin. Thus, to categorise kin relationships as sin is far too limiting an analysis. It may be said, rather, that

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[197] Whilst Williams refers to human kin relations, such as that between siblings, as potentially involving 'altruism', she sees this as biologically bound to the loving of this other in accord with Hamilton's Rule – any love for the sibling is "about half as much as [that for] oneself" (Williams 2000: 807). As such, it is not genuine psychological altruism that Williams has in mind but the sociobiological version of care that is bound to degrees of genetic sharedness.

they become sin in humans only when human care is constrained to this family context,[198] that is, where the natural empathy for others outside this grouping is disregarded in favour of an exclusive care for family.

In Williams' analysis of group relations, she seems to be compounding an extended form of kin 'altruism' (the nepotistic inclusion of kin beyond the immediate family, as well as symbolic kin) with group theory's emphasis upon inter-group conflict. It has been argued in the previous chapters that whilst there is certainly a biological basis to the relations within the nuclear or immediate family, there is very little, if any, support for the innateness of any wider nepotism (Section 4.4) or for human-based group theory (Section 6.3). Again, this is not to say that wider nepotisms and group competition do not occur, but rather that they are not biologically inscribed and thus, are not to be assumed as inevitable aspects of human nature – they are, to use Williams' own chosen term, not *original*. Personal and ideological values, and not biology, play the formative role in these relationships. With regard to reciprocal relations, Williams considers that these are at most about equal exchange and not about love; she says: "For nonrelatives there is no natural love" (Williams 2000: 809). Yet, it is interesting that she cites friendship as one such example of reciprocation for the point made by Pope, in the section above, was that the caring element within friendship is seemingly more benevolent than can be accommodated by reciprocal theory. As in kin relations, Williams casts too negative a slant upon such relationships – a feature that undoubtedly reflects the tone of sociobiological writings themselves.

As one might expect, whilst Pope sees the sociobiological categories of care as largely indicative of the divine will and consequently supported by the NT texts, Williams sees evolved human nature more as oppositional to the divine purpose as revealed in Scripture. She sees human nature as directly

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[198] They are also sinful when they are forged on the basis of self-centred egoism – an example of this may be the offspring who care for their parents, not out of true regard, but in order to access their material resources when the parents die.

contravening the divine intent expressed in the commandment to *"love your neighbour as yourself"* (Williams 1998: 560-561; 2000: 809). Whereas Pope emphasised the appropriateness of the love of self as being indicated in the command, and argued for its fulfilment in the sociobiologically derived self-regard, Williams attends to the *other* in the mandate, the *neighbour*, and argues for her/his laying outside of the sociobiological circle. She says of this text, and other NT teachings, that they are concerned with a generosity that defies the limits of kinship and reciprocal ties, one which is to be extended in love even to one's enemies (Mt. 5: 38-48) – it is not about "bargaining and exchange but giving freely and loving enemies" (Williams 2000: 809). She sees Jesus' teaching and ministry as specifically directed to those marginalised in society, the "Samaritans, Gentiles, adulterers, women and slaves", and that these displace the innate bond to kin, reciprocators and in-group members (Williams 1996: 266). She says of texts like Mt. 12: 48-50 and Lk. 8: 19-21 that "Jesus eschews his biological family" for such outsiders as Samaritans and adulterers (Williams 1996: 266). Whereas Pope stressed the NT emphasis on the care of the biological family, Williams posits its displacement for a much wider altruism. As was mentioned in the section above and will be more fully explored in Section 9.2, the NT calls believers to express a care for both the natural family and those beyond it. It is not a matter of either/or but of concurrent commitments.

In her emphasis upon the other, Williams does not address the matter of self-love that is indicated in the love command. Indeed, implicit in her writings is that self-regard always and naturally takes the form of egoism and that Sociobiology provides an explanation for this. The points made in previous sections of this thesis are, of course, that Sociobiology does not provide a rationale for egoism as it is a feature beyond biological nature. The reality is that humans are capable of both self-love and egoism, and that there is a difference between the two that should not be obscured by interpreting self-regard as existing entirely in one form or the other. Whilst the NT texts, like the love command, endorse self-love, the self-preoccupation of egoism is decidedly not sanctioned (this point is developed in Chapter 8). In fact, it will be argued in Section 8.3 that, the concern for self is even more complex in the NT teachings, for it is ultimately focused upon the other – both human others and God.

Since Williams sees this NT mandate for love of neighbour as beyond the human innate nature for "people are born into a state such that they do not naturally love their neighbours as themselves" (Williams 2000: 809), the matter of how this love is to be fulfilled is raised. In her view, the distance between the command of God and evolved dispositions is bridged humanward, by the human capacity for choice, and godward, by the example of divine love as revealed in Christ. Williams, like Pope, argues that humans exhibit the capacity for choice, a flexibility engendered by self-reflection and imagination, and one in which cultural ideas and values become important (Williams 1998: 567; 2000: 795f). Whilst Williams sees these cultural norms, for the most part, as being coincident with innate, evolved values, she suggests that there is also the possibility for countervailing values derived from "either reason or revelation or both" (Williams 2000: 809). It is through the cultural process, in which values beyond sociobiological concerns are adopted, along with the imitation of role models (Williams 1998: 567), that she sees benevolence as being formed around Christ, specifically his incarnation and atonement.[199] Williams considers that by virtue of Christ's incarnation, he has revealed the nature of the Deity and that of perfect humanity (Williams 1996: 265f); a nature that is shown most explicitly in the atonement as an abundant and humble self-giving, one in which service is taken to the extreme of death (Williams 1996: 265). As such,

> Jesus is doubly an example. He is an example of the perfect human being, giving himself for others even unto death. He also is the perfect revelation of God, a God prodigally self-giving, self-giving in the humility of the Incarnation and the degradation of the Crucifixion. In

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[199] She also notes the biblical claim that God has also provided examples through others such as the judges, kings and prophets of the OT (Williams 1996: 265).

> that degradation, the self-giving of God to humanity is complete. (Williams 1996: 265)

Yet, for Williams, the atonement does not just indicate the nature of love exemplified by Christ, but also the expansiveness of this care. In contrast to Pope, who tended to characterise the work of the cross in the context of friendship and the in-group, Williams sees it as a work effected toward a sinful humanity – as she notes, this is the clear meaning in the writings of St. Paul (e.g. Rom. 5: 8-11; Williams 1998: 566). In the work of the cross, as in Jesus' life and teaching, a love is expressed for all humankind, even as enemies of God and Christ, one that certainly does not recognise any sociobiological biases. She sees this transcendent love as both "an indictment of evolved dispositions that exclusively promote the welfare of self and kin", and the divine provision of a much needed role model for people "to show them how to channel their unwieldy flexibility and to redirect their selfish dispositions" (Williams 1996: 265). Christ sets an example for those who would follow him: "People can choose to imitate it and so be transformed" (Williams 1998: 568). Williams does not limit the work of the cross only to this "educative" role, but sees it also as having an experiential quality for when the risen Christ "draws near" to the sinner, an event "grasped by faith" and dependent upon human choosing, the experience of love and forgiveness deepens the transformative effect in the individual (Williams 1998: 568). So: "Even the strongest disposition can be overruled" (Williams 1996: 264; also 1998: 568) and it is through this that Williams considers that God enables humans to "break their biological laws, their evolved dispositions toward exclusive love of self and kin" (Williams 1996: 266). Whilst Williams is surely right in seeing the example of Christ and the real presence of God with the believer as directing and sustaining altruistic care for others, this should be seen as being effected through natural proclivities and not as contrary to them. The naturalness of empathy-altruism and the subjective sense, with their innate expansiveness, have already been noted in previous sections – the Divine is working through these created abilities.[200]

It is Williams' focus upon the atonement, as indicating the full self-giving nature of God, which is perhaps the most instructive element in her writings. Certainly, it is one which, as will be argued in Section 8.4, accords with the NT texts depicting the work of the cross as an act of humility and sacrifice – an example of radical altruism that believers are called to follow. Williams also indicates the way in which the call of God upon believers, as evidenced in Christ's example and his teachings, requires that such altruism not be constrained primarily to kin, reciprocators and group members but be extended to those outside these bounds. The NT call is to a universal love that transcends the sociobiological categories. Yet, Williams is too dismissive of such relationships as the care for family and in-group members, for these may involve a psychological altruism just as real as the love for outsiders. Indeed, it is both in a psychological altruism toward those within the sociobiological circle, as well as the care for those outside of its circumference, that humans go beyond sociobiological interpretations. There is NT warrant for both of these forms of love to coexist and certainly no reason to see the former as necessarily a form of sin.

7.4 Conclusion

Sociobiologists, where they have considered the relationship between altruism and the NT, have tried to retain the biblical teachings of the faith (and the actions of its faithful like Teresa) within their paradigm, that is, as endorsing the care of self, kin, reciprocators and group associates. As was noted in Section 7.2, such a view is questionable simply on the grounds of

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[200] In fact, as the development of altruism in humans relies on role models, a view that is presumed in Williams' ascribing of import to the example of Christ, might this not suggest, in contrast to Williams, that the human tendency to egoism is also historical? It is induced by a younger generation imitating the sinful attitudes and actions of their forebears. Although it is not possible to pursue the matter of whether this began in a single historical occasion (the account of Adam and Eve), the function of role models indicates that care for others in altruism, as well as its constriction in egoism, has a historical aspect.

the previous chapters, which have shown that human behaviour is not tied to genetic constraints and the biological limits of expressed care. Whilst one might expect that key aspects, such as care within the immediate family, will be present, there is no reason to conclude that humans are bound by the biological descriptives. There is also no basis for thinking that the NT values are determined entirely by natural selection. These points have been borne out in the brief critique of the texts cited by sociologists in support of their view (Section 7.2). Whilst this flexible aspect of humankind is recognised by Pope and Williams, they do not go far enough. Both consider that Sociobiology has rightly constrained innate priorities of care to self, kin, reciprocators and group affiliates – a view which gives more credence to the comprehensive nature of the discipline than this thesis considers is warranted.

Further, although Pope and Williams rightly attend to the issue of motivation, their interpretations of the NT texts, with regard to the categories of self, kin, reciprocals and group, are very different. Whilst Pope sees Sociobiology as presenting insights into the evolved emotional proclivities of humans that are endorsed by the NT teachings, Williams sees rather the opposite. In her view, it is precisely the transcendence of these biological relations which is required of the believer, for while evolution biases attendance to kin, reciprocators and group, this is indicative of human innate sinfulness which the NT so strives against. Their differences are seen also in the issue of self-regard in Sociobiology which tends to be positively appropriated by Pope as self-love, but which is seemingly rejected by Williams as egoism. These diverse perspectives evidently indicate something about the nature of the NT texts, namely, that they are complex. As has already been indicated in the critique of these authors, there are tensions in the NT teachings on love, which recognise: the validity of self-love but not that of egoism; the care of kin but also the requirement for a love of non-kin; and the love of those in the church community, but also those outside. It is to a fuller characterisation of the NT texts and their meaning in the light of Sociobiology, that the remaining chapters of this thesis are committed.

Chapter 8: A New Testament Characterisation of Altruism Based on Phil. 2: 3-8

8.1 Introduction

In this and subsequent chapters, the nature of love as it is depicted in the writings of the NT will be explored, and reflected upon in the light of Sociobiology. The aim is to engage with the sociobiological claim that the NT teachings on love cohere with their renderings of human 'altruism'. Whilst the approach follows that taken by Stephen Pope and Patricia Williams, it is entirely distinctive because it will give much closer attention to the texts, and will rely upon biblical scholarship to this end. In the ensuing chapters, the primary source text will be that of Philippians 1: 27-2: 11, although the discussion will include a large number of NT passages taken particularly from the rest of the Pauline corpus of letters and from the gospels.[201] Having one main text, through and alongside which many others are then explored, brings an overall coherence to a study that considers a wide range of passages. This core text includes an important passage that contains explicit moral directives for Christian relationships. The mandates of Phil. 2: 3-4 are: *"Do nothing from selfish ambition or conceit, but in humility regard others as better than yourselves. Let each of you look not to your own interests, but also to the interests of others".*[202] These verses are themselves set out in the wider pericope as a reflection upon the person and work of Christ in the hymn of Phil. 2: 6-11 – the one who *"emptied himself"* in order to serve others and who "*humbled himself*" in the sacrificial work of the cross (vv. 7-8). As

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[201] Although biblical scholars see letters like Philippians as having been written by Paul, his authorship of especially the pastoral epistles of 1 Timothy and Titus has been disputed since the nineteenth century. Under the scholarship of C. F. Baur, these letters were attributed to the school of Paul's disciples – a view which has itself more recently been strongly contested in favour of Paul's own authorship (discussed in Ellis 1993: 659-661). For the purposes of this thesis, all of the epistles traditionally associated with Paul, and now vouchsafed as such by some in modern scholarship, will be considered conjointly as belonging to a Pauline corpus of writings. The issues surrounding the authorship of the Gospels are considered in works such as Brown (1997).

[202] Some Greek variants of the text exclude the word *"also"*; this matter is discussed in Section 8.3.

such, the text interprets what is distinctive about the Christian faith, namely the Christ event, and applies this directly to human relationships. Thus, the passage of Phil. 2: 3-8 provides a fitting text through which to consider Christ-based love, and it will be the focus of this chapter.[203]

By working with this text at some considerable exegetical depth, this chapter will draw out the very profound nature of the other-centred love that is presented as the call, even the demand, upon the Christian believer's life. In Section 8.2, it will be shown that this NT altruism[204] is characterised by its direct contrast to the egoism of self-promotion and conceit. It involves a radical humility that forsakes such forms of self-preoccupation, and instead concerns itself with the well-being of others. It is a love, which as Section 8.3 will show, is no mere abstraction or sentimentality of feelings but requires practical expression in the active pursuit of benefiting the welfare of these others in every possible way. The very sacrificial nature of this altruistic love, as Section 8.4 will demonstrate, is evident from its grounding in the nature of Christ as expressed in the Philippian hymn that follows these mandates. Here is a radical psychological altruism which, in contrast to the sociobiological emphasis upon the self (and one's own reproductive interests), treats others very much as ends in themselves.

This ideal of NT love will continue to be reflected upon in the next chapters of this thesis, with the ideas in the wider pericope of Phil. 1: 27-2: 11 being used to introduce each section. These subsequent chapters will consider, more specifically, the objects of such love – those to whom the altruism indicated in texts like Phil. 2: 3-4 is to be extended. This is especially important because the injunction to love in this passage (Phil. 2: 3-4) is concerned with the relationship between members in the Philippian congregation – it is describing the relation of believers to one another. So, it would not suffice to

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[203] The import of this passage in influencing Christian thinking is indicated by Karl Barth's comment that it encapsulates the "heart of the Pauline *ethic*", and by Frederick Bruce who refers to it as foundational in NT ethics (Barth 1962: 49; Bruce 1995: 63).

[204] As this care will be shown to take the form of a psychological altruism, the term of altruism will not appear in quotation marks (see Section 1.2).

consider the character of this NT portrayal of love, without considering also to whom this altruism relates in the wider context of NT teaching, namely, whether it is constrained to the relation between believers or has a more expansive relevance to those outside of the church. The concern in these chapters is, of course, specifically how such love relates to the sociobiological categories of the natural family, group members and reciprocal partners. As Chapters 9-10 will contend, the Christian duty to love extends to all; it is a universal calling to the altruistic care of *all* others.

The Philippian passage, which in these chapters is both the locus of study and the springboard for wider NT considerations, is itself located within the particular historical occasion of a letter sent by Paul to the early church in the Macedonian city of Philippi (Bruce 1995: 7f). The purpose for the letter was seemingly personal, in part, and there are overt references in the epistle to it being a response to the Philippians' concern for Paul (who was thought to have been imprisoned at the time), and for Paul's co-worker, Epaphroditus, who was also known to the Philippians and who had been seriously ill (see Phil. 1: 12f, 2: 25f; Silva 1988: 4-5). Yet, these specific concerns are embedded in the wider and more general issues addressed within the letter. As has been noted above, there is a concern for the general character of believers, the nature of the love expressed between them, and how their love relates to Christ. This, in itself, resides within what many see as the central and orientating theme of the letter – the unity of the church community.[205] It is thought that the Philippian context made these issues of love and unity particularly acute as the church was beset by problems of "conceit", "vaunting superiority" and "egocentricity" (Martin 1976: 31).[206] Nonetheless, the

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[205] See, for instance, O'Brien (1991: 36-38) and Hawthorne and Martin (2004: lvi-lvii).

[206] This perhaps reflected the broader Philippian social context – the city had been granted the high prestige of *ius Italicum*, or Roman colony, by Octavian, who later became the emperor Augustus. The title was given because it was upon the plains of Philippi in 42 B.C. that Octavian and Antonio defeated Brutus and Cassius in their bid for a Republic (Hendriksen 1963: 6; Fee 1995: 161). This status meant that the Philippians had the rights of Roman citizens with its financial benefits and political freedoms (Hendriksen 1963: 6-7). Presumably, it would have assured their loyalty to the empire and given them a strong sense of civic and personal pride. It is perhaps this, which in part lies at the basis of their strong tendency toward superiority and conceit.

propensity for such egoism is far from unique to the ancient Philippians, for as the preceding chapters have shown, it is a capacity that is present in all human lives; it is common to all human history. So, just as the letter has general meaning for the NT understanding of altruistic love, it was written with that other common human potential of egoism also very much in mind.

8.2 The Character of New Testament Altruism: Humility and Sacrificial, Other-centred Regard

"Do nothing from selfish ambition or conceit, but in humility regard others as better than yourselves" (Phil. 2: 3)

One of the most striking verses in the letter to the Philippians is the prohibition of *"selfish ambition"* and *"conceit"* from among the believers and Paul's commendation of that contrasting of dispositions, *"humility"*. The original form of this verse contains no verb and literally reads "*Nothing from selfish ambition or conceit*". The omission indicates the very forceful nature of the command – there is no concession, nothing at any time, place or circumstance that should be done from these self-centred orientations.[207] It is an absolute command (O'Brien 1991: 179), "a rule for all Christian lives at all times" (Moule 1889: 62). The command begins with the exclusion of "*eritheian*" (translated *"selfish ambition"*) from the social life of the community. Although the term is rare, it refers to some form of self-seeking behaviour where the interests of the individual are sought over and against the interests of others (Büchsel 1964: 660-661). Frederick Bruce describes it as a desire for "personal prestige" (Bruce 1995: 62), and Gordon Fee as "self-promotion" and "self-aggrandizement" (Fee 1995: 186). The strength of Paul's disavowal of this conduct can be seen by the inclusion of *"eritheian"* among the features that are said to characterise the sinful nature in Gal. 5: 19-21 where it is listed alongside such acts as *"idolatry"*, *"sorcery"*, *"strife"* and so on. It is among the attributes that Paul fears he will find among the Corinthian Church (2 Cor. 12:

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[207] See, for example, Hawthorne (1983: 68), O'Brien (1991: 179) and Michael (1928: 79).

20). As Ralph Martin says, it "belongs to his [Paul's] vocabulary of social evils" (Martin 1976: 89). There was evidently no place in the Christian community for such self-centredness.[208]

The exclusion of such egoism is reinforced by the second of Paul's negative injunctions – the repudiation of *"kenodoxia"* (translated as *"conceit"*). The term *"kenos"* means "empty, hollow, false" and *"doxa"* is understood as "opinion, glory, majesty". Hence, the expression is most often understood as "empty conceit, vainglory" (e.g. Collange 1979: 79; O'Brien 1991: 180), although others like Gerald Hawthorne prefer to see its root meaning as "empty opinion" – the view of one who "assertively, even arrogantly, claims to have the right opinion... but is in fact in error" (Hawthorne 1983: 69).[209] Both fit with the idea of an egoism where the self is the focus of attention and there is a sense of superiority over and against others. The rivalrous implication of the term is seen in the use of its cognate in Gal. 5: 26 – "*Let us not become conceited [kenodoxoi], competing against one another, envying one another*". In either case, whether vainglory or arrogant opinion, the disposition is clearly one of self-promotion over others, a seeking of status and a preoccupation with the self that leads to ambition, rivalry and jealousy (Hawthorne 1983: 69; Fee 1999: 87). It is a self-centred attitude where attention to the self takes precedence over any concern for others.[210]

In the Philippian injunction, the use of *"alla"* (*"but"*) introduces the alternative that serves as the contrast to these two negative dispositions so markedly rebuked by Paul (Silva 1988: 101) – *"but in humility regard others better than yourselves"*. The attribute of *"humility"* or *"tapeinophrosunai"* is offered as the social "antidote" to the individual self-centredness that was rupturing community life (Martin 1987: 97). For writers like Hawthorne, humility is the

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[208] This is evident in other texts such as 1 Cor. 13: 5 where among the listed aspects of love is that it is not self-seeking.

[209] Both senses have precedence in ancient Greek literature and in the Apocrypha (Oepke 1965: 662).

[210] Where pleasure, feeling good about oneself, is derived from a sense of superiority over others, and which supersedes the care of others.

key motif of the pericope (Hawthorne 1983: 69). The term was used in Classical Greek of the low estate and "absence of human dignity" of the poor man or slave whose consequent attitude to superiors was one of submission (Grundmann 1972: 2). As Richard Melick says, it "conveyed the sense of being base, unfit, shabby, mean, of no account" (Melick 1991: 94). Humility, far from being a pagan virtue, was very much deemed as a "shortcoming" (Fee 1999: 88).[211] Scholars are keen to point out, however, that the NT humility had none of the negative associations with self-debasement and total depreciation (e.g. Martin 1987: 97; Michael 1928: 81). As Fee observes such servility is self-serving (Fee 1999: 88) – its concern is to promote the self by overtures of false humility that belie the true motivation of pride and self-centredness; it is a form of egoistic self-concern that is mediated through the appearance of lowness. This is not what Paul had in mind as is clear in texts like Col. 2: 18, 23 where he describes the self-denial of asceticism as a *"false humility"*; the bearers of which are in fact, *"puffed up"* – inflated with conceit and vanity (Col. 2: 18). NT humility is distinguished from its counterfeit in the false, ingratiating kind of submission that has a self-concerned ulterior motive (Thurston & Ryan 2005: 75; Martin 1987: 97). As George Caird rightly observes of the text: "Christian humility is not self-disparagement, which is either dishonesty or inverted pride, but self-effacement" (Caird 1976: 117).

Nonetheless, the very radical nature of this humility should not be overlooked, for the humility that is indicated in the text is surely the very trait of the low and slavish disposition that was despised by the surrounding pagan culture. This is evident when the text is considered alongside the hymn of the Christ who both *"humbled himself"* and took on the very *"form of a slave"* (Phil. 2: 7, 8). Whilst the way in which Christ is the exemplar for this disposition will be discussed in Section 8.4 below, it is suffice to note here that humility meant taking a position of utter lowliness, and Paul is clear in

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[211] This is seen, for example, in the contemporary use of the term in Josephus' writings to refer to the meanness of Emperor Galba when he withheld a gift that he had promised to the praetorian guards (Bruce 1995: 66).

making this correlation. Although it does not refer to self-serving servility, nevertheless, it does imply a radical form of lowliness. Believers were to see themselves very much in the background like those deemed as inferiors in pagan society who went unobserved by others. They were voluntarily to show a self-abnegation with regard to themselves – a moving away from any preoccupation with the self's own feelings and wants, toward what may be seen as a partial self-forgetfulness. One might express it as an abandoning of the excessive hedonism and consequent egoism which tends to see the self as the primary or only subjective being. Further, just as egoism leads to relational issues of competitiveness and rivalry, such humility also has meaning for the believers' relationships. In the movement away from the absorption with self, the element of self-abnegation that is evinced in humility prepares the way for other-centred regard. Humility moves the locus of concern away from the self, and so opens the mental and emotional space for an appreciation and care of others. Humility is not love[212] but it is a prerequisite for the genuine loving regard of others. This is surely what Ceslaus Spicq means when he says: "Humility forbids us to exalt ourselves at our neighbour's expense, to prefer ourselves to him, or to oppress him... [humility] disposes the Christian to serve his brothers" (Spicq 1965: 269).

The associating of the humility of self with love for others in this Pauline text probably has the OT conception of this disposition in mind. In contrast with its incongruity as a virtue within pagan culture, humility was a familiar ethic to Jews (Ridderbos 1975: 297).[213] The term was used in relation to Yahweh's acts in history in which he brings low the proud and exalts the lowly, small and despised; casting down the arrogant and raising those of a humble heart.[214] It was used to depict the creaturely dependence of a person on a transcendent and powerful God, and the sober awareness of one's finiteness, weakness, and even sinfulness, before the Divine's holiness. OT

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[212] One might think lowly of oneself but not engage in loving others.

[213] There are 270 occurrences of the term *"tapeinos"* and its cognates in the Septuagint (O'Brien 1991: 180).

[214] OT examples can be seen in 1 Kings 21: 29, 2 Chr. 12: 7, Isa. 5: 15 and Prov. 18: 12.

humility was an attitude of self-reflection that acknowledged one's limits and failures, and these in relation to God (e.g. Fee 1995: 188). Yet, such humility before God leads naturally to a humility and love in relations with other people (e.g. Martin 1959: 93). The awareness of one's smallness and unworthiness before the Divine brings a sense self-transcendence, which moves the self away from self-preoccupation and allows true humility and altruism toward others to emerge. Colin Grant makes this point (Grant 2001: 237, 248)[215], as does Stephen Post who says:

> It may be that the most exemplary altruism is often associated with the agent's personal experience of the utter enormity of the Transcendent, including a sense of overwhelming awe. Overawed, the deeply humbled self is transformed through something like an ego-death to a new self of profound humility. (Post 2002: 63)

As such, the nature of NT humility must be informed both by the attitude of those of low estate like the slave, and by a sense of the power and otherness of the Judaeo-Christian God with its consequent meaning for human relations. It is presumably with both in mind that Paul wrote to the congregation at Philippi. While these undoubtedly lay in the background to the text, Paul overtly interprets this disposition in the light of Christ, a connection that, as Section 8.4 will contend, deepens even further the self-denying nature of humility and its consequences for altruistic love.

Given the association of humility with altruism, it is perhaps not surprising that the commendation of humility in Phil. 2: 3 is followed immediately by the call for believers to *"regard others better than yourselves"*. The self-abnegation of humility is followed by the call to other-centred regard. The English translation of this Philippian phrase captures little of the emphatic nature of the clause. The term *"regard"* is *"hegoumenoi"* which carries the sense of a careful reckoning, that conscious and deliberate focusing upon the other (Fee 1995: 188; Hawthorne 1983: 70). Even the term *"better"* is more

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[215] Grant's view that this self-transcendence is sufficient for altruism, and that it is negated by specific instructions, has been disputed in Section 1.1.

aptly translated "surpassing, greatly exceeding" which is the sense in which it is used in the Septuagint (O'Brien 1991: 182); it has the connotation of "going far beyond anything else" (Fee 1995: 189). The significance of this term for Paul can be seen in its use elsewhere in the letter to refer to the *"surpassing value of knowing Christ"* (Phil. 3: 8) and of the *"peace of God which surpasses all understanding"* (Phil. 4: 7); it was a term of extremity and intenseness. It indicates a radical other-centredness where the other becomes very much the object of one's attention.[216] The command to reckon others as surpassing oneself shows that the precedence is upon the other over the self. In the terms of the prior chapters of this thesis, whereas hedonistic regard is down-played in the attribute of humility, in the command which follows, the subjective sense of the other and empathetic regard is overtly directed toward an abiding concern toward others. Thus, Collange is right when he writes of the text that "the simple fact [is] that the Christian should live his life in such a way that his ultimate concern is the other man, *he* is paramount" (Collange 1979: 80). As Roger Mohrlang says: "For Paul... real love demands self-denial... Christians are not to live for themselves but for others" (Mohrlang 1993: 577). The superiority of self in egoism has been supplanted in the text by the superiority of the other in radical altruism. It should be noted that those to be considered surpassing are *"allalous"* or "one another" (O'Brien 1991: 182); its remit encompasses all within the community.

The commands for humility and love in the Philippian text are, of course, not unique to this epistle and such dispositions are referred to throughout the Pauline corpus. The attribute of humility, and the related term of meekness, are listed among the qualities which should characterise the believer (see

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[216] Some scholars have understood this attribution of others as better than oneself as a matter of considering others as more gifted and/or more spiritual than oneself (see Calvin 1851: 53; Michael 1928: 81; contra Barth 1962: 56-57). Even if this sense is intended, the respect and esteem consequently ascribed to these more spiritual or gifted persons naturally entails an attention to their needs. This is especially so given the pagan context of deference and solicitude expected of inferiors to those socially above them.

Col. 3: 12; Titus 3: 2; Rom. 12: 6, 3; 2 Cor. 10: 2; Ridderbos 1975: 298).[217] The call for both humility and love can be seen in texts like Eph. 4: 2 where believers are to be characterised by *"all humility and gentleness... bearing with one another in love"*. In Col. 3: 12-14, believers are required to *"clothe [themselves] with compassion, kindness, humility, meekness, and patience. Bear with one another and... Above all, clothe [themselves] with love"*. While the nature of this other-centred love will be developed in the sections that follow and in Chapters 9-10, its qualities of radical humility and other-centredness are already evident. Thus, Victor Furnish rightly says of NT love that it involves a "radical *giving up* of one's self and a radical *being given over* into the service of others" (Furnish 1968: 204). As David Alan Black puts it: "the proper attitude of the Christian... consists in a total lifestyle of... humility... expressed in a selfless concern for the interests and welfare of others" (Black 1985: 302).

In summation, the Pauline call in this text is for a Christian response to others, which is marked by its very contrast to the self-centred egoism that seeks to promote the self over others. Notably, the issue in the text is not the promotion of reproductive-replicative interests but those self-centred propensities that come to the fore in egoism. In this, the text assumes what has been argued for in Chapters 4-6, namely, that human nature is not constrained to such motives as reproduction, but has the capacity for egoism and for the converse of other-centred altruism. Indeed, the passage not only negates the acceptability of egoism, but provides a prescriptive for altruism in what can perhaps be seen as the two-step process of humility followed by a preoccupation with others. In the imperative of humility, one's eyes are taken off the self, and in the injunction to regard others as surpassing, their gaze is set firmly on attending to the other. The matter of how this disposition relates to the actual behaviour evinced by believers, and the way in which the needs of others are given preference without any denial of the self's own needs, are

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[217] It is found also in the other epistles (such as 1 Pet. 3: 8; 5: 5; Jas. 3: 13), and is associated with Jesus and his teachings in the gospels (e.g. Mt. 11: 29; 23: 12; Lk. 14: 11).

issues which are taken up in the next section.

8.3 The Praxis of New Testament Altruism: The Priority of the Needs of Others over Self

"Let each of you look not to your own interests, but also to the interests of others" (Phil. 2: 4)

This Philippian verse continues in the same vein of an ardent commanding of care for others. The participle *"skopein"* (translated as *"look"*) parallels the intensity of the *"regard"* for others in the preceding verse; it has the meaning of consider "as your aim", view "closely", "fix one's attention" upon (Thurston & Ryan 2005: 75; Martin 1987: 98; O'Brien 1991: 184). It is, again, the whole community that is included in the injunction (O'Brien 1991: 185); to *"each"*, is given the requirement that they *"look... to the interests of others"*. The term rendered *"interests"* in English translations is literally *"ta"* or "the things" (Thurston & Ryan 2005: 75). Martin considers that these things of others are to be understood spiritually as the gifts and abilities of the other, "their good points and qualities" (Martin 1987: 98). Thus, one is to be preoccupied in the encouragement and establishment of the gifts of the other; these capacities are to be noticed and valued (Martin 1987: 98). Beare suggests that the matter being referred to is even more basic than that of gifts and should be understood as the rights of each person (Beare 1988: 73). John Michael, followed by many others, has however, argued that a rendering of the clause as the concern with the gifts (or rights) of others does not fit with Greek participle of "looking" (Michael 1928: 82). This verbal term has the sense of regarding an aim or an object; it is more appropriately used of ideas or objects and not of persons or personal qualities. Thus, Fee suggests that the clause refers to all matters and interests relating to others (Fee 1999: 88 and many others[218]), and it is about placing these "needs ahead of our own" (Fee

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[218] See, for example, Hawthorne (1983: 69), O'Brien (1991: 184-185), Osiek (2000: 54) and Jones (1918: 29).

1999: 88).[219] Indeed, Caird, who prefers an emphasis on rights, suggests that Paul deliberately used the vague term *"ta"* so as to encompass all things related to the other, whether their spiritual gifts, rights or material privations (Caird 1976: 117). It lays the demand on the activities and energies of those who would live by this rule to be concerned for the other in every sense, and to make this their aim – the purposed focus of their lives. The need to respect and value the spiritual qualities of others is seen in the letter to Corinth (1 Cor. 12: 1f), so too can the concern to provide for the material needs of others be seen in the wider Pauline corpus and throughout the NT.[220] Thus, the dispositions of humility and other-regard described in v. 3 are seen as outworking themselves in the caring behaviour which attends to the welfare of others in every sense in v. 4.

In fact, scholars like Martin may have been inclined to limit the text to spiritual realities (or matters of rights in Beare), because of the potential absoluteness of the command. The text in some of its variants excludes the term *"also"* or *"kai"*. When *"kai"* is included, the reading of the text assumes the attentiveness to one's own concerns, when it is omitted, the verse infers that attention is given to the other at the cost of neglect to self (Bruce 1995: 66). As O'Brien notes, the "earliest and widespread" versions of the text include the *"kai"* and he suggests that these should be given priority in translation (O'Brien 1991: 164). Thus, the text indicates a concern for self that is to be held alongside the concern for others. Karl Barth, however, does not like this constraining of the text and suggests that *"kai"* should not limit the meaning of the ethic, but should be interpreted as a further mark of emphasis (Barth 1962: 57-58). The text should perhaps read: "Also let each of you look not to your own interests, but to the interests of others". The priority of the other is such that it displaces entirely the concerns for the self. This view is seen also in Spicq's comment on the text, as he considers that Paul "asks the

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[219] This priority of the other over self is also evident in other passages like 1 Cor. 10: 24 and 13: 5 where believers are commended not to seek their own advantage but to attend to others (Silva 1988: 101-102).

[220] See, for example: Rom. 12: 8, 13; 1 Tim. 6: 18; 2 Cor. 8: 3f; Acts 2: 45, 4: 35; 1 Jn. 3: 17; and Mt. 25: 32f.

Philippians to watch out for their brother's good without paying any attention at all to their own interests", a "loving attention" which "excludes every attention to self" (Spicq 1965: 300). Barth and Spicq clearly reflect the stress upon the priority of the other over the self in the text (an emphasis which is recognised by all exegetes), but in terms of praxis, such a perspective would surely become self-defeating. As Stephen Post observes: "Altruistic love does not eclipse care of the self... for without this the agent would eventually become unable to perform altruistic acts" (Post 2002: 52). In the terminology of the preceding chapters, entirely ignoring the hedonistic drive would lead to the deterioration (and eventual death) of the self, and the taking of unnecessary risks and sacrificial actions in instances where the needs of both the other and self could have been met.[221] In fact, while the priority is evidently upon the other in the text, most scholars consider that the self is not to be neglected (noted by Greenlee 1992: 102). The question, therefore, becomes whether these two claims, for self and for other, should be seen as separate and simply co-existing, or whether they have some bearing upon one another. This matter is not resolved in the Philippian text but, as this section will now contend, other biblical texts indicate that the latter is the case – for self-regard has an other-centred motive.

The elements present in the Philippian injunction are seen in texts like 1 Thess. 4: 9-12. Here also, the matters of the priority of the other, the implicit need to care for oneself, and the very practical nature of the other-love are indicated. In 1 Thess. 4: 9-12, believers are commended both *"to love one another"* and *"to mind their own affairs"* by actively seeking employment so that they can provide for their own needs and are "*dependent on no one*". Richard Melick sees this passage as providing an exegetical context for understanding the Philippian injunction, showing that personal interests were not to be ignored, and that this was primarily because such a neglect placed an unnecessary burden on others in the community – the believer "must take care of their own affairs as an act of love for the congregation" (Melick 1991:

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[221] The import of the hedonistic drive to avoid an unnecessarily self-annihilating kind of sacrificial care was noted in Section 4.5.

95). The believer was to provide for their own needs out of an other-centred regard that sought not to encumber others in the community (see also Best 1972: 178; Wanamaker 1990: 163). Yet, the context of this passage suggests an even deeper other-regard, for it is set in a pericope which is concerned with the practical expression of love for others, specifically that of hospitality toward other believers as they travelled through the commercial centre of Thessalonica (1 Thess. 4: 9-10; Best 1972: 173-174; Wanamaker 1990: 161). The implication of the text is that believers were to manage their affairs and seek employment, not only to meet their own needs, but so that they had resources to give to others (Best 1972: 173-174). These desires not to encumber others and to provide for them can be seen in Gal. 6: 5, 2 where the sense is that "the believer never lets himself be a burden to others" and "always seeks to help others with their burdens" (Best 1972: 178). The one who works and takes care of his/her responsibilities is the one who both takes less from others in the community and is able to give more.

This is the reason that Paul requires of those, who had formerly been thieves, that they now work honestly *"so as to have something to share with the needy"* (Eph. 4: 28). Not only is stealing a vice which is inappropriate for a believer (1 Cor. 6: 10f, 1 Pet. 4: 15), but here it is doubly denounced because rather than taking from others, the believer is called to contribute to the practical welfare of those in need (Snodgrass 1996: 250f; O'Brien 1999: 342; Best 1998: 453-454). As Andrew Lincoln says, it is sharing with the needy that is here "the explicit motivation for work", it is an action directed not at "individual profit but rather communal well-being" (Lincoln 1990: 304). Hence, Klyne Snodgrass says that the "goal was for believers to be self-supporting *and* supportive of those in need" (Snodgrass 1996: 251). So, the inclusion of an appropriate care for self, in no way deflects from the other-centredness in the care of others but rather adds to it – the care for self here is not indulgence motivated by self-interest but is an action directed at freeing the community from unnecessary demands, and freeing the self to contribute practically to the well-being of others. In fact, Snodgrass suggests that this text "ignites a bomb under all our self-centred thinking. Our goal is not enjoyment, it is productivity so that we can give. We do not exist for ourselves, but for relations with other people and with God" (Snodgrass 1996: 258). It is of note that Eph. 4: 28, like the Philippian injunction, is seemingly based on the imitation of the nature of Christ, the one who *"loved us and gave himself up for us"* (Eph. 5: 1-2; Snodgrass 1996: 254). The care for self, therefore, is not a discrete claim that is simply held alongside the care for others, but is part of the altruistic love for the other – and this as a reflection of the nature of Christ.

Some further comment on the relation of self and other is perhaps helpful at this point. The text has taken the vantage point of the giver, yet, for such benefactors to exist there must also be recipients. Is the act of those who put the others' interests first, other-centred, while the beneficiaries themselves are self-centred? Such a conclusion is not necessary, as receiving can also involve the abnegation of the self, this time from self-centred independence; and when it receives the gifts from the other in genuine gratitude it is other-centred in its focus. Even the desire for the other to fulfil one's own needs may be sought out of concern for the character of the other. Its enjoyment is not just in having one's needs met but in the beneficence of the other. This is seen particularly in Paul's own relationship with the churches under his care where their meeting of his needs is celebrated not for his own sake but as indications of their character and growth in mature self-giving love (e.g. Phil. 4: 10-18). The element of other-centredness also surely lies at the basis of the love of self. The biblical teaching is that human created existence and their re-creation (redemption through the cross) are given as gifts from God and are for the praise and glory of the Divine. The self's existence is received from God and is for God. This is seen in the Psalmist's words: *"I praise you, for I am fearfully and wonderfully made"* (Ps. 139: 14), and is a repeated theme in the Pauline writings (e.g. Phil. 2: 11; 1: 11; Eph. 1: 12-14; 1 Cor. 10: 31; Rom. 11: 36). This means that the very act of valuing and loving the self should ultimately lead to the other-directed response of praise and thankfulness to God. Hence, even in self-love, love takes an other-centred form.

This section has drawn out the way in which the other-centred disposition engendered by humility and altruistic love expresses itself in the behaviour of the believer. The generality of the things in Phil. 2: 4 is best understood as an indication of the comprehensive nature of this care for others (a view which is supported by other NT texts). Its meaning is that all things that pertain to the other, from the spiritual to the very practical, are to be given attention. The self is actively to pursue the other's best interests in every sense. Whereas sociobiologists would predict a care that is proportional to the self's genetic interests (e.g. Section 4.2, 4.6 and 5.2), here is a psychological altruism that is evidently beyond such constraints. Indeed, although there is no neglect of the self's own needs, this section has shown that even the provision for self has an other-centred motive. This care of self is directed both at relieving the burden of the need for others to care for the self and at providing the opportunity to care for others. Even in the acts of receiving and in the valuing of self, there is an other-centredness as the self rejoices in the goodness of the human and Divine other. The depth of this call to other-love is still more radical when it is seen in the light of the Christ who *"emptied himself"* and *"humbled himself... to the point of death"*; the matter taken up in the next section where the Philippian injunction will be considered in the context of the hymn to Christ.

8.4 The Basis of New Testament Altruism: The Imitation of the Nature of Christ

"[Christ Jesus], who, though he was in the form of God

did not regard equality with God

as something to be exploited,

but emptied himself,

taking the form of a slave,

being born in human likeness,

And being found in human form,

he humbled himself

and became obedient to the point of death

even death on a cross" (Phil. 2: 6-8)

This hymn[222], in the letter to the Philippians, is both a magnificent and, in some ways, highly complex passage. Its presentation of Christ has been much debated and discussed by scholars with suggestions that he is being portrayed as the figure of Wisdom,[223] the Gnostic Redeemer,[224] the Righteous Sufferer,[225] the Isaianic Servant[226] or the Second Adam[227]. It may be that at least some of these backgrounds are subsumed in the hymn. Notably, in many of these ascriptions, both the humanity and divinity of Christ are assumed – his being as perfect humanity and Divine Son.[228] It is, however, not the purpose of this section to engage further in matters of Christology, instead, the emphasis is upon the relationship between Christ and the nature of the mandates for love, which were discussed in the preceding sections. Although the nature of Christ's being is clearly important in the hymn, the passage itself draws attention to the ethical implications of his life and death. The hymn is introduced in v. 5 with the formulae: *"Let the same mind be in you that was in Christ Jesus"* (Phil. 2: 5). This *"mind"* (*"phroneite"*) has the wider meaning in the Greek of attitude and moral sense, and forms the bridge between the moral injunctions for a radical altruism in the immediately

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[222] The features of the passage, like the use of chiasmus and alliteration, show that the text was most probably intended as a hymn (see O'Brien 1991: 188-193, 198-202; Thurston & Ryan 2005: 77-79).

[223] See the discussion of Dieter Georgi's argument in J. T. Sanders (1971: 70-74).

[224] For Ernst Käsemann's view see Käsemann (1971: 49) and the discussions in Sanders (1971: 66-69) and Barclay (1997: 65).

[225] Eduard Schweizer's view is discussed in O'Brien (1991: 194-195).

[226] See, for example, Lucien Cerfaux (1959: 377-379).

[227] See Morna Hooker (2003: 112-113) and James Dunn (1980: 114-121).

[228] Discussed by Martin (1967: 205-207).

preceding verses and their relation to Christ.[229] He is the pattern or model upon which these dispositions and behaviours are ultimately based, and this section will consider what the text indicates about the nature of this imitation of Christ.[230] For several key terms describing the character of love in the preceding moral injunctions are shown, by the use of related cognates, as having their foundation in the attitude and behaviour of Christ as portrayed in the hymn.

The verb *"regard"* ("*hegoumenoi*") which is found in the Philippian verse "*regard others as better than yourselves"* recurs at the start of the hymn. It is used with reference to Christ who *"did not regard equality with God as something to be exploited".* The sense is that Christ, as the Pre-existent Son, refused to exploit his divine rank and privilege, a meaning which is perhaps also being contrasted to the first Adam who "grasped" after such Divinity (Hooker 2003: 112-113).[231] As Divine, Christ "refused to use for his own gain the glory that he had from the beginning" (O'Brien 1991: 216) – unlike Adam, who "grasped" after divinity, Christ did not egotistically and greedily try to cling to his divine privileges (Hooker 2003: 112-113). The meaning of the text is evidently that Christ did not seek his own personal advantage and benefit (e.g. Fee 1995: 188). When this usage is related to the command in Phil. 2: 4 to regard others as surpassing oneself, the striking preference for the other is

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[229] This is underlined by Paul's requiring of the believers in v. 2 that they *"be of the same mind, having the same love"* – a clause in which the term *"phroneite"* (*"mind"*) is again used in parallel with v. 5. Between these two verses, the mind or attitude of the Philippians has been explicated in terms of the preferring of the other and their interests, and now through the introductory sentence of v. 5 is connected to the *"phroneite"* of Christ as shown in the hymn.

[230] Ralph Martin has challenged the traditional, and still prevailing view, that Christ is being portrayed in the hymn as a moral example for others to imitate – he considers that the hymn is soteriological and that v. 5 is about being "in Christ"; it has the meaning of: "Have this mind among yourselves which is yours in Christ Jesus" (Martin 1976: 90-93; 1987: 99-100). Although this is a view which has been argued against at exegetical length by scholars like O'Brien (1991: 256-262), even Martin sees the way of being in Christ as modelled after Christ – believers "must share his [Christ's] spirit, and be controlled by the pattern of self-effacement and humility which his incarnation and cross supremely display"; their "unity and humility" are a response to Christ's own attitude (Martin 1987: 99-100).

[231] The term translated as *"exploited"* has been interpreted by some in the active sense of seizing or grasping (e.g. Moule 1970: 266-268, 271-274), and by others in its passive form as that which is seized (e.g. Lightfoot 1994: 124; Hawthorne 1983: 79; Gnilka 1971: 35).

underlined further by the Christ who chose not to seek for himself but rather, as the next verse makes clear, took an attitude of self-giving in *"emptying himself"*. As Charles Moule says, Christ did not concern himself with *"getting"*, instead he *"gave* – gave until he was 'empty'" (Moule 1970: 272). The call to regard others is shown as involving a deep and radical self-giving.

The very term for this emptying is *"ekenosen"*, a cognate of the *"kenodoxia"*, the vain and empty conceit that is so severely denounced in the preceding injunction (see Oepke 1965: 660-662). By this linguistic parallel, the egoism of conceit is surely being starkly contrasted to the manner of Christ.[232] In him, there was no seeking for such a self-promoting and vain glory, but rather a complete giving of himself. The nature of this emptying is explained in the phrases that grammatically follow, in his *"taking the form of a slave"*, *"being born in human likeness"* and being *"found in human form"*. Notably, this *"ekenosen"* is not linked to *"in the form of God"* from which it is separated by the introductory term of 2: 7, that of *"but"* (*"alla"*); it is not related to matters of Christ's forgoing some attribute of divinity but rather his assuming of humanity (O'Brien 1991: 218).[233] Christ relinquished his heavenly glory in assuming humanity in the incarnation (Bornkamm 1975: 201). This sacrificial nature is further emphasised in the particular human form in which Christ was to be found – that of a slave. This metaphorical ascription relates to the deeply self-giving and serving nature of Christ's attitude to others – he voluntarily took the position of a slave who in ancient society had no rights or privileges and whose existence was given over to attending to others.[234] This

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[232] The import of this contrast is all the more significant when one considers that both of these terms are uncommon in the NT (for their rarity see Oepke 1965: 661-662).

[233] Some scholars in the area of science and theology consider that this kenosis of Christ refers to his giving up aspects of his divinity, and this interpretation of the text has contributed to postulates of the kenotic behaviour of God in relation to creation (see Coakley 2001: 193-194); the God who emptied himself to make room for the existence and free action of creation (including humankind). This view is evident in the book *The Work of Love: Creation as Kenosis* edited by John Polkinghorne. Biblical exegesis of this particular text does not, however, support this view. Christ's kenosis is not related to matters of his forgoing of divinity but rather the text implies that Christ "emptied himself by assuming humanity" (O'Brien 1991: 218; also others like Caird 1976: 121). Thus, the approach seen in the *The Work of Love* is not taken up in this chapter.

[234] Given the pagan background of the readers, Charles Moule rightly suggests that this metaphor should be understood in the light of slavery in the ancient society (Moule

is a reflection upon the self-giving in his condescension to the incarnation, but it also looks forward to one of the climactic points in the hymn, his giving of himself in the crucifixion. Larry Hurtado is probably right that the metaphor also encompasses the traditions of the gospels, the nature of Christ's response to others in his life and ministry – his serving in which he gave his time and effort for the well-being of others and required that his disciples do the same (Hurtado 1984: 121-122, 124). In his birth, life and death – Christ's nature was characterised by that of sacrificial service.

So, in his form as a slave, Christ revealed "true servanthood" and this was to be the "pattern" of believers in their self-giving for others (O'Brien 1991: 224). It is hard to imagine a more different nature than that of Christ to the repudiated self-preoccupation of vain egoism and selfish ambition. Here, rather than self-directed concern, is the one who chose to spend himself for others. As Fee notes, the self-centredness which set the priorities upon oneself is not just prohibited in Paul's injunctions but is shown through the hymn as being in complete and utter contrast to that mindset possessed by Christ (Fee 1999: 87). So, Frank Stagg says of the text, "the 'mind' to which the Philippians are called is found pre-eminently in Christ Jesus himself in his radical self-denial and self-giving... What is intended by 'mind' is disposition" and "'in Christ' that disposition is that of servanthood, whatever the cost to self" (Stagg 1980: 337-338). As Christ had made himself a slave to the needs of others, so also should this attitude of serving be the mark of the believers – they "are to be servants of one another through love" (Ridderbos 1975: 294).

It should be noted that by Christ's clear identification with humanity, his assuming of human existence, the altruism required of believers becomes

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1970: 268) – a view supported by Bruce and O'Brien (Bruce 1995: 78; O'Brien 1991: 223-224). As O'Brien notes, the pagan hearers would be most familiar with slavery as a social form (O'Brien 1991: 223-224). This contrasts with Cerfaux's suggestion that slave refers to the Isaianic Servant (Cerfaux 1959: 377-379) – although the two views are not mutually exclusive.

real and tangible – it is the patterning after another human life. The importance of human models for the development of altruism has already been noted in Section 4.6. So, Patricia Williams is right that through Christ, a bridge between divinity and humanity has been made such that humans can participate in the nature of divine, sacrificial love (Section 7.3.2). The example of Christ shows that this altruism is not based on the nature of a Deity so far removed from human affairs that attaining this ideal of love is an impossibility, but one who knows intimately human limits and potentialities. This love cannot be dismissed as accessible only to Divinity, its expression, no matter how imperfect, is attainable by humanity for those who would follow after the Christ who took *"human form"*. So, whilst some aspects of the incarnation and Christ's suffering on the cross are not accessible to humanity, the motivation of self-denial and the radical prioritising of others, underlying them are.

The ideal of humility in Phil. 2: 3 (*"tapeinophrosunai"*), which is the grounds upon which such altruistic love is forged (Section 8.2), is also endorsed in the hymn by the use of its cognate to describe the attitude of Christ in Phil. 2: 8. The text refers to the humility (*"etapeinosen"*) of Christ who *"humbled himself and became obedient to the point of death – even death on a cross"*. The very radical nature of this humility, the totality of its self-abnegation is best appreciated in the context of the text's milieu. Crucifixion was considered the most degrading and shameful of deaths in this ancient society both by Jews and pagans (see 1 Cor. 1: 23). For those who were Jews, it was the curse of God in keeping with the teachings of Deut. 21: 23; for the pagans, it was the punishment associated with the most violent of criminals or the lowest of classes including slaves. In fact, for the Philippians, it would perhaps have been particularly detestable for, on account of their status as Roman citizens (see footnote 206), they were not subject to this form of execution, and indeed were only arrested for the most serious of crimes (Hendriksen 1963: 6-7). So offensive was this form of death that "in polite Roman society the word 'cross' was an obscenity, not to be uttered in conversation" (Bruce

1995: 71; see also 1 Cor. 1: 18-23; Gal. 5: 11). Yet, this death upon the cross is not only included in the hymn but, as mentioned above, forms a climax within it.[235] It is a humility that, by its contrast to attitudes in ancient society, shows the totality of self-abnegation and self-denial that is involved. This humility and other-love in Christ is such that he relinquishes self-concern and is willing to take the lowest and most demeaning of states, not only in the serving life of the slave but ultimately, in the serving death of crucifixion.[236] So, while Paul's commands for humility and other-centred love in the preceding verses (2: 3-4) were radical enough in themselves, they become even more so in the light of the hymn. The profound nature of humble and sacrificial love takes on its full meaning in Christ, who is the "supreme example and illustration of these characteristics" (Black 1985: 303).

The Philippians could be in no doubt of the nature of humility and love which was being required of them. Indeed, the grounding of the character of altruistic love in Christ shows that the injunction in the letter was not intended as peculiar to the ancient Philippians, a prescriptive bound by the historical circumstance at Philippi, but one that pertains to all who would base their lives on the example of Christ. Thus, Christ is the exemplar of such radical love throughout the Pauline corpus (see e.g. Rom. 15: 2-3; 1 Cor. 10: 31-11: 1), and in the other epistles (e.g. 1 Pet. 2: 21; 1 Jn. 3: 16). Yet, as Hurtado noted, the love that takes the form of a slave in texts like Philippians, has precedence in the gospels also. The use of the slave as a symbol for Christ's self-giving to others, and this as the attitude required of believers, is seen in the gospel traditions. The disposition of servanthood and slavehood is one that all of the Synoptics record as necessarily being the mark of Jesus'

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[235] It is the climax of the first stanza, one that parallels the rhythm of the second climactic phrase in v. 11, the finale of *"to the glory of the Father"* (Bruce 1995: 80; Hofius cited in O'Brien 1991: 230).

[236] The matter of whether Christ's death in the hymn is being portrayed as self-giving for humanity or as exemplary of obedience to God (self-giving in submission to the Father's will) is debated among scholars. The two are, of course, not incompatible for Christ said: *"No one has greater love than this, to lay down one's life for one's friends"* (Jn. 15: 13), yet, he did so in compliance with the Father's will (Jn. 15: 21). Gerald Hawthorne aptly describes this duality of purpose in his statement that "Christ set himself to obey God by serving humankind" (Hawthorne 1983: 89).

followers.[237] In Mt. 20: 25-28 (Lk. 22: 24-27; Mk. 10: 41-45), Jesus requires of his disciples that they take the place of the slave and the servant in their attitude and actions toward others – *"whoever wishes to be great among you must be your servant, and whoever wishes to be first among you must be your slave"* (Mt. 20: 26-27). Again, like the slaves whose lives were directed at minding the cares and concerns of their owners, so too Jesus' followers were to be given over to a concern for others (Morris 1992: 512; Bruner 1990: 734). As in the Philippian passage, the gospels present both the contrast to this attitude and its exemplar in Christ. Jesus compares this disposition with those who sought self-importance and power over others, those *"who lord it over"* them; and he gives himself as the role model – for *"just as the Son of Man came not to be served but to serve, and to give his life a ransom for many"* (Mt. 20: 28; also Mk. 10: 45)[238]. In the texts, Christ's self-giving is the pattern set for lives given over to the needs and welfare of others (e.g. Smith 1989: 241). So, R. T. France says:

> In this the Son of Man is an example, not in that his disciples can also give their lives as a ransom, but in the attitude of service (putting others first) which inspired his unique self-sacrifice. The form of service will be different from his but its motivation will be the same, *not to be served but to serve.* (France 1985: 293)

They must follow Jesus' example of serving, altruistic regard that is humble and deeply sacrificial in nature.

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[237] Whilst the emphasis in the Pauline letters is upon the incarnation and the work of the cross, rather than the specific teachings of Christ, among some of the terms common to both the Pauline epistles and the gospel traditions of Jesus is that of *"doulos"* (*"slave"*) and *"diakonos"* (*"servant"*). In both sets of texts, these expressions are used as references to Christ's and to the believers' lives of service to others. Larry Hurtado sees this as indicating Paul's dependence upon the gospel teachings in the Philippian hymn as in the other usages of the terms in: Rom. 15: 3, 8; 1 Cor. 11: 1; 2 Cor. 4: 8-11; 5: 14; and 1 Thess. 1: 6 (Hurtado 1984: 121-122).

[238] Whether Jesus' reference to himself as a ransom is original to the gospel or a later addition, and what exactly is meant by this seeming allusion to the Isaiah servant songs, is discussed in Hagner's commentary on the Matthean text (Hagner 1995: 579f).

8.5 Conclusion

The Philippian text of 2: 3-8 is a strong prohibition of the self-centredness that is characteristic of egoism. Among believers, there is to be no such self-preoccupation, instead, the disposition that should mark the believer is that of a profound altruism that requires for its expression both self-abnegation in the attitude of humility and the empathetic and personal/subjective preoccupation with the other as surpassing oneself. In humility, the locus of concern is moved away from the self, and in the command to consider others as surpassing, the attention is directed toward the other. This attitude is not just a matter of a romanticised ideal but of praxis, as the expression of this altruism is required in the active pursuit of the needs and well-being of such others, whether their spiritual state or the privations of their material needs. It is a love, which as Section 8.3 argued, does not mean that the regard of the other is so overwhelming that the self's own needs and welfare are utterly obscured and lost. Yet, notably even in the matter of self-care, as is indicated in texts like Eph. 4: 28, there is strong element of other-centredness as this self-concern has as its motivation the other – both in avoiding putting unnecessary burdens upon the community and in equipping the self for giving to others. The radical nature of this other-centred love is shown by its grounding in the example of Christ who in contrast to the egoistic conceit of *"kenodoxia"*, emptied (*"ekenosen"*) himself in the service of others, and for whom humility meant submitting to the most offensive form of death in the full extent of this serving love, death on a cross.

When one reflects on the nature of the deep, sacrificial altruism indicated in the Philippian text in the light of the previous chapters of this thesis, several issues come to the fore. As was noted above, the text implicitly assumes the human capacities for both egoism and altruism, which are, of course, beyond sociobiological explanation for they transcend the drive to reproduce and replicate one's genes. Thus, what has required some discussion in the preceding chapters to establish, is taken as the accepted nature of humans in the NT texts. Moreover, unlike Stephen Pope who tends to view such altruism in the NT texts, as somewhat limited by the priority of self over others, this chapter has shown the converse. The Philippian text assumes that humans can express altruism in a form that places the other before the self, and requires that they do so. Indeed, it is Patricia Williams who better captures the radical self-giving that the NT espouses in its imitation of Christ, yet, it is without the negation of the self, which she also implies. It was noted above that the very function of Christ as exemplar for such love indicates that the NT texts implicitly recognise another important aspect of altruism; namely, that its expression in humans requires key role models. This role of Christ also shows that such altruism is not an unattainable ideal but by virtue of his humanity, Christ shows that this love can, even if only imperfectly, be expressed by those who pattern themselves after him. Thus, whilst the depth of this altruism lies beyond Pope's own construal (and certainly, that of sociobiologists), it is by no means unachievable. The nature of this altruistic love will be developed further in the next chapters of this thesis, ones that will also address the important matter of to whom this love is to be shown.

Chapter 9: A New Testament Response to Sociobiology's Categories of Care in Kin and Group

9.1 Introduction

This chapter considers the matter of to whom the NT teaches that care should be extended. It looks at this issue through the categories which sociobiologists themselves consider are the beneficiaries of human care – those of kin and group (that of reciprocators will be the subject of the next chapter). The chapter begins in this section with a review of the arguments set forth in the preceding chapters on kin and group 'altruism'. In the sociobiological theory of kin selection, there is recognition that humans naturally express care for kin, even at cost to the self, although in that paradigm this is always tied to reproductive and genetic effects (Section 4.2). The points made in Sections 4.4-4.5 were that humans have indeed inherited biological propensities to care for their immediate family, and that this is especially pronounced in the parental care for children. In fact, parents, as well as other key community figures, are important as role models in developing an empathetic sense in children, which allows them to perpetuate the care of progeny in future generations (Section 4.6). Nonetheless, it was argued that the very capacities of empathy and the sense of others as subjects/persons in their own right, allow a genuine psychological altruism to occur where the care for the individual is not constrained by reproductive-replicative outcomes, but rather treats the other as being of ultimate concern. Within these family relations, as Section 4.5 indicated, ideological beliefs may reinforce or undermine the potential for this altruism (see also Appendices 2 and 3). Whilst this research discounted human group selection as a convincing biological theory, it was noted that humans do form groups and that these *may* have the characteristics described by group selectionists, where there is a care for members and an apathy or even hostility toward non-members (Section 6.3). It is also possible, contrary to the sociobiological view, for a group to express a care for those outside of its membership. It was contended that the particular features of groups are determined by cultural values (Section 6.3).

The way in which the NT mandates encourage a profound psychological altruism has been set out in the previous chapter; now, using motifs and ideas from the wider pericope of Phil. 1: 27-2: 11 to introduce each section, the matter addressed is to whom this deep altruism is directed in the NT. Is it, as sociobiologists and even theologians like Pope suggest, constrained to kin and group, or is it as Williams has argued, an altruism which forgoes the family and group, and cares for those outside of these bounds? The sections that follow will contend that it is a very comprehensive love that is required of the believer, one that goes beyond the views of both Pope and Williams. It includes the natural family but also transcends it, not only in a love for the family of the church (Section 9.2), but also in a love for those outside of the communal church group (Section 9.3). It is a universal love that knows no bounds, one that is not even limited to reciprocators, as the next chapter will argue.

9.2 Kin Altruism: Its Expansion from the Natural Family to the New Family of Believers

"Only, live your life in a manner worthy of the gospel of Christ, so that, whether I come and see you or am absent and hear about you, I will know that you are standing firm in one spirit, striving side by side with one mind for the faith of the gospel" (Phil. 1: 27)

In the Philippian passage above, Paul uses the metaphor of citizenship from the Greco-Roman world to describe the unity of the Philippian congregation. Paul requires that his readers *"live"* (*"polieusthe"*) lives worthy of the gospel of Christ – a verb which meant to be a citizen or to live as a citizen.[239] This

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[239] This is discussed by Hendriksen (1963: 80), and is the view of many scholars including: Hawthorne (1983: 62); Fee (1995: 16); Martin (1976: 82); Lightfoot (1994: 63); Collange (1979: 73); O'Brien (1991: 146); and Beare (1988: 66).

term was probably deliberately chosen by Paul because of its significance for the Philippians for whom their Roman citizenship was important (see footnote 206). So, just as they bore a strong allegiance to the empire, the Philippians must be committed to their citizenship in Christ (see also Phil. 3: 20). This was not simply a matter of the individual belonging to the realm of Christ, for ancient Roman cities were not "just a place of habitation" as many modern cities are (Beare 1988: 66), but ones where internal unity and harmony were the mark of such metropolises (e.g. Lightfoot 1994: 120; Osiek 2000: 48). The Philippian converts had become part of a unified community under the headship of Christ. The primary import of unity is further evident in Paul's requirement that they be of *"one spirit"* and of *"one mind"*.[240] Whilst this model of citizenship is one way in which Paul depicted the strong bond of relationship between believers, it is not the only, nor even the primary, way.

Paul, far more frequently, refers to the members of the community as being a family in Christ. Believers are called brothers and sisters throughout the Pauline corpus[241] and indeed, in all of the other epistles[242]. This new relation to one another stems from their status as the children of God (e.g. Phil. 2: 15)[243] – those who have been born of the Spirit and adopted as children of the parental God, the Father (Rom. 8: 15)[244]. Although much more common in the epistles is Christ's own appellation as the Son, indicating his unique relation to God the Father, his role is also shown in familial terms as the head of the household of the church, and the first and eldest in the human family belonging to God.[245] This family, of course, extended beyond the local congregation to all those who were followers of Christ – the church universal.[246] The members of this family were to care for each other's needs

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[240] See: Collange (1979: 74); Martin (1959: 85; 1987: 88); Barth (1962: 47); Osiek (2000: 49); Michael (1928: 66); and Thurston and Ryan (2005: 69).

[241] This can be seen in, for example: Phil. 1: 12, 14; 3: 1; Eph. 6: 23; Gal. 1: 11; 6: 18; Rom. 16: 1; 2 Cor. 13: 11; 1 Cor. 16: 20; Philem. 1: 2; and 1 Tim. 5: 1.

[242] See, for instance, Jas. 1: 2, 2: 15, 1 Pet. 3: 8, 2 Pet. 3: 15 and 1 Jn. 2: 9.

[243] Other texts include Eph. 5: 1, 1 Pet. 1: 14 and 1 Jn. 3: 1.

[244] Seen also in 1 Jn. 3: 1, 2 Jn. 1: 4, Jas. 1: 17, 1 Pet. 1: 2 and Jude 1: 1.

[245] Consider, for example: Eph. 2: 19-20; 1: 10, 22; 4: 15; Col. 1: 17-18; 2: 19; 1 Cor. 15: 45f; and Rom. 5: 19.

[246] The use of the familial descriptor beyond the local community is clear from the salutations sent between churches (e.g. Phil. 4: 21; 1 Cor. 16: 20).

within the local congregation (Phil. 2: 4), but also for the needs of other congregations (1 Cor. 16: 1-2; Gal. 2: 10; Rom. 15: 25-26). Through these kinship terms, a new form of family was forged among those who were not natural (biological) kin. This family also transcended clan, tribal and ethnic groupings to include Jews, Samaritans, Romans, Phrygians, Phoenicians, Galatians, Macedonians and so on. So, N. T. Wright speaks of the early church as having "functioned from the first in terms of an alternative family", it was a "familial community", a "new family", one not formed around genetic relatives nor even ethnic divisions but around all who were "in Christ" (Wright 1992: 448, 450).

Clearly, these NT texts take the idea of kin relationships beyond the sociobiological boundary of kin selection. By encompassing those of diverse genealogical backgrounds into the uniting theme of family, there is a superseding of the biological category of genetic relatives in kin theory. Not only so, but this familial bonding with non-kin, as Chapter 8 has indicated, has as its ideal a deep and radical psychological altruism toward these others – one which surpasses the limited care expected by sociobiologists in the biological 'altruism' between natural kin. Whether by so doing the NT creates an internal bonding between believers that is aimed at mutual reciprocity, or at establishing a group that is exclusive and rivalrous toward outsiders, will be discussed later. It is suffice to note here that through the kinship terms of the immediate biological family, a new family is formed which is independent of biological relatedness and the limits upon care in kin theory. As Patricia Williams observed, it is through the cultural process in which family terms are applied in the "fictive" sense to non-kin that the symbolic family is formed (Section 7.3.2). Yet, the NT depiction of this family is much deeper than the term "fictive" implies for although its formation is mediated by the cultural process, these bonds are formed through the spiritual rebirth and renewal which establishes believers in an eternal family context. They are relationships which, unlike the temporary nature of biological relations that are ended at death, are portrayed in the NT texts as continuing beyond death (e.g. Lk. 20: 34-36; 1 Thess. 4: 13-18). Believers are entering into kin relations which are perceived as every bit as real as the biological kinship ties, if not more so.

If one took Williams' view of the propensity to care for natural kin as indicative of original sin, then the texts cited above would show the way in which the NT transcends the inherent sinfulness of biological kin 'altruism'. Yet, the assumption that kinship ties are implicitly evil very much presumes upon the sociobiological interpretation that they are 'selfish' (genetically, psychologically and to some degree, phenotypically; see Chapter 4). In contrast to which, it has been argued that these natural bonds can be characterised by a psychological altruism – a point rightly heeded by Pope (Section 7.3.1). In addition, in many species, humans included, these kinship bonds entail many other aspects of 'altruism' (genetic and phenotypic), and are essential for perpetuating species (e.g. Sections 4.5-4.6, 2.3.1). It is, therefore, no discredit to the NT teachings that, in fact, alongside this expansion of kinship toward non-biological relatives, are prescriptives that require that believers care for their biological family. This is seen throughout the Pauline corpus which calls repeatedly for the sustaining of the nuclear family unit – husbands and wives are to love and support each other, and together to care for and discipline their children (e.g. Eph. 5: 21-6: 4; Col. 3: 18-21; also 1 Pet. 3: 1, 7). It should also be noted that reproduction itself is seen as a blessing in the OT (e.g. Gen. 1: 28) and is supported by the teachings of both Paul and Jesus (e.g. 1 Tim. 4: 1-4; Mt. 19: 1-6)[247]. For although the NT also supports celibacy (e.g. Mt. 19: 12; 1 Cor. 7: 7), especially for the purpose of furthering Christ's kingdom, both this and marriage are seen as gifts from God.[248]

In fact, that the care for the biological family was not seen simply as an

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[247] See Thiselton (2006: 101), Hays (1997: 114-115), Kelly (1963: 95) and Morris (1992: 484) – all of whom also note that these texts refer back to Genesis 1-2.

[248] This is the position of: Mounce (1991: 182); France (1985: 284); Bruner (1990: 689); Kelly (1963: 95); Hays (1997: 114-115); Thiselton (2006: 101, 106); and Witherington (1995: 176).

accommodation of surrounding cultural practices but was rooted in the divine will, is evident in texts like 1 Tim. 5: 3-8, 16. This passage requires believers to care for their needy relatives as part of their Christian obligations:

> *Honour widows who are really widows. If a widow has children or grandchildren, they should first learn their religious duty to their own family and make some repayment to their parents; for this is pleasing in God's sight... And whoever does not provide for relatives, and especially for family members, has denied the faith and is worse than an unbeliever... If any believing woman has relatives who are really widows, let her assist them; let the church not be burdened, so that it can assist those who are real widows.* (1 Tim. 5: 3-8, 16)

This very striking disavowal of a believer who does not show such care as having *"denied the faith"* must refer in part to its effective rejection of Paul's instructions on care within the biological family – it was a denial of apostolic teaching.[249] As John Kelly observes, caring for one's natural family is shown here as "an elementary duty" of the believer (Kelly 1963: 115). The rebuke that such a neglect would make the individual *"worse than an unbeliever"* is presumably because even those outside of the community of God, who either do not know or do not accept the apostolic teachings, nevertheless, naturally acknowledge the rightness of care between family members, especially that of the immediate unit of children, siblings and parents (Kelly 1963: 115). This is no surprise given the strong genetic factors that facilitate the bonds of the nuclear family (see Sections 4.4-4.6). So, while the Pauline epistles frequently refer to the new family of believers, this is not seen as displacing the natural one. There is rather the presumption that the natural family relations will persist alongside the new family in Christ. This duality of responsibilities is not entirely unlike that which Paul sees in the matter of citizenship, the issue that introduced this section. In texts like Rom. 13: 1-5

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[249] The teaching in this passage on care within the family most probably had, as its basis, the instructions and precepts of the OT which placed a high value upon the responsibilities within the natural family. This is supported by the use of *"tima"* translated *"honour"* as the appropriate recognition of the widows in 1 Tim. 5: 3, a term which is used in the fifth commandment of honouring one's mother and father (Ex. 20: 21) – see Mounce (2000: 278).

and Tit 3: 1, believers are to submit to the state and fulfil their duties as its members (see also 1 Pet. 2: 13-14; Heb. 13: 17). Yet, in texts like Philippians 1: 27 and 3: 20, the community members are also encouraged to bear the citizenship of Christ also. Just as believers are dual citizens who belong both to the society of Rome and to the heavenly kingdom of Christ,[250] they are family members with responsibilities toward their biological kin as well as to their brothers and sisters who are in Christ.

The relationship between the duties of the believer to the new family of God and those to natural kin undoubtedly formed a point of tension for the converts. Indeed, the very fact that in the 1 Timothy passage, widows were turning for aid and support to the church community over that of their natural relatives, and that the community was responding to their needs, is itself surely indicative of this. The matter is, of course, which then was to be given the priority – the biological kin or the family in Christ? The Pauline texts nowhere state explicitly the primacy of one over the other, and there are instructions for care within both realms. The tension is never directly nor fully resolved, and the expectation is seemingly that both commitments will be sustained by the believer. The closest that the Pauline teachings come to setting one over the other is in Gal. 6: 10: "*So then, whenever we have an opportunity, let us work for the good of all, especially for those of the family of faith*". The *"all"* is a prescription for universal care (discussed further in Section 9.3) which presumably includes the natural family. If this is so, then the family of faith is seemingly given as the priority in loyalty and in the bond of love.[251] This is the view of those, like N. T. Wright, who see the family of Christ as superseding although not entirely replacing the relations with natural kin (Wright 1992: 449). Although the Galatian text may indicate the priority of the church community, as it makes no direct reference to the

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[250] The idea of a dual citizenship is the scholarly view of Fee (1995: 161), Martin (1976: 82), Hawthorne (1983: 62), Beare (1988: 66), O'Brien (1991: 146) and others.

[251] An additional support to this may be found in 1 Cor. 7: 12-16 where although converts were not encouraged to divorce their unbelieving spouses, they were not to feel bound to retain the relationship if the spouse decided to leave, even in the circumstance of their having had children (e.g. Hays 1997: 121).

natural family, it should not, however, be pressed too far as a comparison between such kin and the church. It is perhaps best to see both sets of obligations as co-existing rather than necessarily hierarchically ordered.

This twofold set of responsibilities for care can also be seen in Jesus' teachings within the gospels. In the Matthean gospel, Jesus rebukes the Pharisees and teachers of the law for giving their money in support of the temple rather than to aid their parents (Mt. 15: 1-6; also Mk. 7: 10-13).[252] In these texts, Jesus refers to, and upholds, the honouring of mother and father prescribed in Ex. 20: 12 and Deut. 5: 16 to which he gives precedence, in contrast to the Pharisees, over the gifts to the temple (e.g. Hagner 1995: 431). This upholding of the respect due to one's parents is also seen in Jesus' response to the man who asks: "*Teacher, what good thing must I do to get eternal life*?" (Mt. 19: 16-19; also Mk. 10: 17-30; Lk. 18: 18-30); to which, Jesus enumerates, among the five commandments, the honouring of parents (Mt. 19: 18). Also present in this list is the command prohibiting adultery – emphasising the import of the husband-wife relationship which, as mentioned above, Jesus reinforces as the divine will of God in the creation of humankind (Mt. 19: 3-9; Mk. 10: 1-12). Jesus' teachings also presume that parents will, in general, love their children for he says:

> *Is there anyone among you who, if your child asks for a fish, will give a snake instead of a fish? Or if the child asks for an egg, will give a scorpion? If you then, who are evil, know how to give good gifts to your children, how much more will the heavenly Father give the Holy Spirit to those who ask him!* (Lk. 11: 11-13)

Jesus both assumes and endorses the bonds within the natural family.

Yet, the characterisation of believers as constituting the family of God is also seen throughout the gospels where Jesus refers to his followers as the

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[252] He also seemingly endorses the death penalty set in Ex. 21: 17 for those who curse their parents (Mt. 15: 4; Hagner 1995: 431).

children of God who is their Father.[253] It is to *"our Father"* that Jesus taught his disciples to address God in prayer (Mt. 6: 9; Lk. 11: 2; also Mk. 11: 25), and it is these disciples, rather than Jesus' own natural family, who form the inner circle of his life and with whom he shares his confidences (e.g. Mt. 13: 10-11; Jn. 7: 1-10). In fact, in Mt. 12: 46-50 (also found in Mk. 3: 31-35), an event is recounted in which Jesus' natural family, standing outside the place where he was teaching,[254] sent a message for him to come to them. As Leon Morris observes, the context indicates that his family felt that they had the natural right to interrupt his teaching and that he should stop what he was doing and attend to them (Morris 1992: 331). In response, Jesus stretched out his hand over those listening to his teaching and said in reply to his own rhetorical question of "*Who is my mother, and who are my brothers?"* – *"Here are my mother and my brothers. For whoever does the will of my Father in heaven is my brother and sister and mother".* In keeping with the epistles, those who belong to Christ are now his family (Mounce 1991: 123; Bruner 1987: 472-474). It is the view of some biblical scholars that this particular text indicates that the new family is given some precedence over the natural one (e.g. Morris 1992: 331; Hagner 1993: 359; France 1985: 215). Indeed, Donald Hagner speaks of Jesus in Mt. 12: 46-50 as "redefining basic" human relations such that the family of believers "takes priority over all else"; "Old loyalties have given way to new ones" (Hagner 1993: 360). There is now "a tie which is closer even than that of the family" (France 1985: 215). Although Jesus' teachings indicate that natural obligations to biological kin were not to be dispensed with, there is seemingly a deeper demand upon the disciple to those within the community of faith.

The matter of family priorities becomes perhaps even starker in Jesus' warning in the Matthean gospel:

> *Do not think that I have come to bring peace to the earth; I have not*

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[253] See, for example, Mt. 5: 45, 6: 6f and 23: 9.

[254] Both Mounce and Bruner suggest that, as Jesus' family were *"standing outside"*, this is an indication that they were not within his intimate circle as they had not yet accepted the role as his disciples (Bruner 1987: 471-472; Mounce 1991: 123).

> *come to bring peace, but a sword. For I have come to set a man against his father, and a daughter against her mother, and a daughter-in-law against her mother-in-law; and one's foes will be members of one's own household. Whoever loves father or mother more than me is not worthy of me; and whoever loves son or daughter more than me is not worthy of me.* (Mt. 10: 34-38)

The sense is evidently that the commitments to the natural family must not take priority over loyalty to Christ (e.g. Smith 1989: 151; Harrington 1991: 152) – this meaning is indicated also in the parallel Lukan text of Lk 12: 51-53 and is given equal import in the book of Mark.[255] As Morris notes, the text portrays a radical rupture for the division is between: the father, the head of the household and the one to whom public and private allegiance was due, and the son, his heir; the mother, the key figure in the female section of the household, and her daughter; and the daughter-in-law and her new marital family, for whom she has already relinquished ties with her own natural family (Morris 1992: 267). Yet, as scholars observe it is not an alienation that is to be sought out by the believers themselves, rather the division stems from the rejection of the believers by their family members following their conversion.[256] "Jesus does not come to poison family relationships, but rather he brings a division, regrettable but inevitable, between those who respond to his mission and those who reject it" (France 1985: 188). As such, there is no positive command in the text for a dismissal of natural family ties. Moreover, the priority given here is that of Christ before the natural family, rather than specifically the family of believers over natural kin. Nonetheless, the attachment to the natural family is conditional – it is not to be maintained at a cost to the allegiance to Christ. The fact that there is no such conditionality in

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[255] In Luke 12: 51-53, Jesus' dividing of family loyalties is again understood by scholars as indicating the primacy of the loyalty to Christ (Bock 1994: 235-236; Schweizer 1984: 215; Ellis 1974: 182; Evans 1990: 541-542; Nolland 1993: 710). Stephen Barton suggests that the Markan text is even more negative in its portrayal of Jesus' natural kin for, whereas Matthew's gospel indicates that some of Jesus' natural family later joined the community of the disciples, in the Markan text the last reference to Jesus' family is found in Mark 6: 4 where Jesus says that a prophet is not received among his own family and household (Barton 1992: 226).

[256] This is the view of Harrington (1991: 152), Mounce (1991: 98), Morris (1992: 267), Bruner (1987: 394) and France (1985: 188).

the love for other believers is suggestive of its priority.

In Mt. 19: 29 (also Mk 10: 29-30; Lk. 18: 29-30), the issue of the family resurfaces as Jesus is recorded as saying: *"And everyone who has left houses or brothers or sisters or father or mother or children or fields for my sake will receive a hundred times as much and will inherit eternal life".* Notably, children are included here in the list of those from whom one may be separated on account of commitment to Christ. As Frederick Bruner notes, however, the reference to children is not to *"paidia"*, the young children who are dependants upon the parents, but to the older offspring *"tekna"* – it is about being divided from grown offspring and not the little children who require their parents' care (Bruner 1990: 719). There is no precedent in the text for a rejection of the parental requirement to love and care for young, dependent children. So, while there is seemingly a priority upon the family of Christ in the gospels, the texts do not dispense with the obligations of care within the natural family.

Given the use of the familial language for the community of believers, it is important to also consider the potential effect of these kinship terms upon the matter of altruism. What might this familial imagery add to the nature of Christian altruistic love within the community? The character of this altruism has already been delineated in Chapter 8 where it was shown to be marked by a deep, other-centred regard. It seems likely that this would have been reinforced in the relationships between believers through the use of the familial titles. It is notable that these terms were taken, not from the extended family (that of aunts and grandparents), but instead from the immediate or nuclear family. As was observed in Section 4.4-4.6, these bonds are naturally strong ones and involve a number of genetic factors that generate deep attachments between the individuals. The appellation of believers as children and siblings seems likely to encourage this altruism through its reflecting of these primary, innate relationships. The other is not an unknown or alien (even on the first time of meeting) but belongs within the natural intimacy of the immediate family. What has been experienced and/or observed in society (as not all have loving parents and siblings) is taken up and translated implicitly into the relations between believers. The usage of familial terms adds a depth to the binding love between believers.

The application of familial terms in reference to God as Father, and Christ as brother and leader of the household of faith (Col. 1: 18; Heb. 3: 6), also surely makes an important contribution to the believer's expression of love. The import of the imitation of Christ, who provides a model for altruism, has already been noted in Section 8.4. God, the Father, is also shown as giving and caring in the NT texts, and this divine love is seen as setting the pattern of care for others, which believers are explicitly called to emulate (e.g. Mt. 5: 43-48; Eph. 4: 32-5: 1; 1 Jn. 4: 7-11). It seems likely that the usage of familial terms for both Christ and the Father by the believing community, would strongly endorse this patterning. It was noted in Section 4.6 that there is an innate propensity for children to use senior family members, especially parental figures, as models for their behaviour and attitudes. There is a biological basis for the natural emulation by children of key figures like parents, one that is particularly important for the development of altruism. As such, the giving and sacrificial nature of the Divine must surely more deeply impress itself upon the believer as the model for love by its facilitation through the familial terms.[257] Although this may be more complicated for believers who convert at the adult stage, where the receptive childlikeness to familial example is less acute, it probably still remains as an innate sense which recognises implicitly the place of family role models. Might this be in part what Jesus is referring to when he says: *"I tell you the truth, unless you change and become like little children, you will never enter the kingdom of heaven"* (Mt. 18: 3)? Converts are perhaps being encouraged to rekindle

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[257] While the emphasis is upon the matter of kin in this section, it should also be noted that community leaders are also important as role models in the development of altruism (Barber 2004: 114f). Christ as the head of the household of God, and in his status as priest and king, encompasses in various ways his leadership of the Christian community. This, of course, further enhances the imitative effect of his sacrificial nature upon those who belong to Him.

their inherent bias toward an openness and sensitivity in the familial context, one that includes receptiveness to the patterning of love after important kinship figures. So, at the start of this section, it was shown that the familial terms in the NT expand altruism beyond the natural family to the community of believers, and now it is suggested that these titles also deepen the intensity of this expressed altruism.

In summation, it has been argued that the NT, through the use of familial terms, requires that care be extended beyond the biological category of natural kin to the church community – a group without genetic, national or ethnic boundaries. This symbolic use of kinship terms makes a significant contribution not just to the breadth of altruistic care, but to the depth of the relations between these believers. The natural care that characterises the biological family is taken up into community relations, and the example of the deeply self-giving nature of the Divine is further impressed upon believers in this family context. God as Father and as Christ form models, which in accord with the innate bias for humans to imitate senior family members, make a deep impression upon the believer.

Yet, both the Pauline corpus and the gospels require that believers also be loving and attentive to their natural family. Although the texts indicate that the priority may be upon the family of God over natural kin, the overall sense is not either/or but both/and. Care for biological kin is not sinful, as Williams suggests, but rather believers carry dual obligations, to the natural family and to the church, and both of these are good. Nonetheless, although there is no sound sociobiological rationale for group 'altruism', it could be argued that the church family ideal is simply one of an internally altruistic care for group members with its corollary of a rivalrous disaffection for those outside of the group (at least, the non-kin outsiders). This will be addressed directly in the section below where it will be argued that the very nature of internal group care within the community has its meaning, the purpose of its very existence, in an orientation to those outside of the group.

9.3 Group Altruism: The Relation of the Christian Community to Those Outside

"If then there is any encouragement in Christ, any consolation from love, any sharing in the Spirit, any compassion and sympathy, make my joy complete: be of the same mind, having the same love, being in full accord and of one mind" (Phil. 2: 1-2)

The unity between believers, which was expressed through the metaphor of a common citizenship in Phil. 1: 27, and throughout the letter in kinship terms (Section 9.2), is repeated in the verses which follow (Phil. 2: 1-2). Believers are called to have a common love and esteem as they share the *"same love"* for one another[258] – the radical and sacrificial nature of which, as patterned after Christ, has been argued for in Chapter 8. They are also to possess the *"same mind"* – a term *"phroneite"* which relates not just to common mental assent but has the wider meaning of emotions, attitudes, values, moral action, will and lifestyle.[259] Believers were to be united to one another through their whole being, from inner disposition to outward conduct (O'Brien 1991: 178). This conjoining is further underlined in the call for them to be of *"full accord and of one mind"*; there was to be no dissension but rather full agreement such that they had *"one mind"* or were "literally of one-soul" in their attitudes and purpose (Hawthorne 1983: 68).[260] Another element of this communal existence was the practical sharing of material possessions (see Section 10.2). The unity which involves believers in a common life and binding altruistic regard is a repeated theme throughout the Pauline letters and forms one of the principal ideas in his writings.[261] As Morna Hooker

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[258] See, for instance, Hendriksen (1963: 99), Michael (1928: 78), O'Brien (1991: 178) and Hawthorne (1983: 68).

[259] The many aspects indicated by the term are explored by: Silva (1988: 101); Hawthorne (1983: 68); Fee (1995: 184); Moule (1889: 62); Michael (1928: 78); Hendriksen (1963: 99); and O'Brien (1991: 178).

[260] See also Fee (1995: 186), Moule (1889: 62) and Hendriksen (1963: 99).

[261] The theme of unity through self-giving love and shared purpose can be seen in many other texts (e.g. Rom. 12: 10; 1 Cor. 1: 10; 2 Cor. 13: 11; Gal. 6: 2; Eph. 4: 1-6; Col. 2: 2;

observes, Paul's concern for the unity of the Philippian congregation is a motif that is characteristic of all his epistles (Hooker 2003: 107).

It is a unity, which as Phil. 2: 1-2 shows, is grounded in the experience of believers for they have felt the *"consolation from love"* and the *"encouragement", "sharing", "compassion and sympathy"* of being in Christ. Whilst the immediate source for each of these experiences is much debated, scholars agree that the ultimate origin is the Deity.[262] The believers are united through their common experience of divine love and compassion whether this is mediated through other believers or directly imparted by God.[263] So, as Bonnie Thurston and Judith Ryan say of the text, the grounds for unity stem ultimately from their common reception of God's love – all have shared equally in the benefits of divine love and grace through Christ (Thurston & Ryan 2005: 73f).[264] This divine love, as mentioned above, is the pattern and inspiration for the believers' own love for one another. Yet, the Pauline texts indicate that this reception of divine love and grace, not only forms the basis of their love and forges a unity among believers, but it also sets them apart from others in their society (e.g. 2 Cor. 6: 14-18).[265] It is an experience that is both the source of their internal love and togetherness as well as the boundary that defines the believers as that distinctive group of the church – as different and separate from others. Here then is a deeply bonded community, one that involves the unison of the whole being of each believer and more particularly, one formed in and through self-giving love – a united group that, by nature of its origins, is also demarcated off from the rest of

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3: 14).

[262] In fact, according to Gordon Fee there is a Trinitarian substructure to the text in the encouragement by Christ, the love of the Father and the fellowship/sharing of the Holy Spirit (Fee 1995: 178-181); such a view of the text as reflecting the activities of the Trinity is also taken by J. A. Moyter (1984: 103).

[263] As Patricia Williams noted this experiential aspect means that Christ is not just an example, but also "draws near" to the believer and impresses deeper the altruistic regard for others (Section 7.3.2). One might say that Christian love is stimulated by the Deity in the believer, inspiring and creating other-love within the believer.

[264] This unity is not just mediated by the experience of divine love, but this in itself reflects the wider view of believers as being forgiven, justified and reconciled to God through Christ (e.g. Rom. 5: 8-10).

[265] Separateness is also indicated in Rom. 12: 1-2, Eph. 2: 18-19, 4: 18, and Col. 1: 21-23; and in non-Pauline texts like Jn. 8: 23 and 17: 14.

society.

Given this unity between members, as well as its characteristic of separation from others, the sociobiological criticism of the NT as presenting a form of group 'altruism', is perhaps understandable. Even though there is no sound biological basis to such group formations, it is evident that humans do form groups and that they can be exclusive, concerned only with what makes their members distinctive, and interested only with the care of these members – they may even express an aversion toward outsiders. Is this then the meaning of the congregated group of the church in the NT writings? Certainly, this is the interpretation of sociobiologists like David Wilson who see the NT texts as sustaining internal bonds of love while also marking believers off from others in their society – forming an "in-group morality and out-group hostility" (Section 7.2). Clearly, there can be no denial that a very strong unity between believers and separateness from others is indicated in the texts. The matter is whether Wilson's characterisation of the relation of these aspects of the community to the surrounding society are correct such that the altruistic love between believers is constrained only to those within the church's membership, and that separateness is expressed as an indifference or even rivalry toward outsiders. This issue will be considered through two related but distinctive approaches – the first will look at the effect of the community upon those outside *as it relates within itself as a united and internally loving group*. The second will take up the matter of to whom the NT duty of altruistic care is bound, whether to group members alone or additionally to those outside – it will consider the community *as it relates not within itself but to outsiders.* Thus, this section will consider the relation of the community to outsiders, both in terms of its inward or in-group orientation and its outward or out-group orientation.

The issue of the relationship of NT unity and distinctiveness to wider society is seemingly addressed in the Philippian text of 1: 27 where the call is given to believers to be *"striving side by side with one mind for the faith of the* *gospel"*. Here again, a striking unity is depicted as believers contend *"side by side"*[266]. The text links this strong unity with that of *"the faith of gospel"*. There are those like Ralph Martin who have argued that its meaning is that through a united striving, along with mutual loving support, the believers were to secure the "grand deposit of Christian truth" (Martin 1987: 88; also Hawthorne 1983: 57-58). In presenting a united and cohesive group, the believers were more able to protect the doctrines of the faith. Yet, this phrase has also been interpreted by Handley Moule as referring to the witness of the community's life – as a united and loving people they were most effective and convincing in their sharing of the gospel of Christ with outsiders (Moule 1889: 59). In reflecting the unity and love of the Divine in their relations with one another, the believers serve a missionary purpose as they present God's invitation of love to all humanity – they act as an emblem of divine love to the surrounding world. This evangelistic meaning is supported by others like Bruce (1995: 56), Melick (1991: 90) and Fee (1995: 166-167).[267] As such, the unity and distinctiveness in love is not just for the benefit of believers but is intended also for those outside, it is a witness that invites a response to accept Christ and to enter the community. So, Andrew Lincoln says "the quality and unity of the church's corporate life has everything to do with the fulfilment of its calling in the world" (Lincoln 2003: 138).[268] Luke Johnson speaks of Paul's vision of the church's mission as being, not a "specific task" but rather "a character of life that it is to exhibit" (Johnson 2003: 203). This perhaps goes too far as Paul is elsewhere clear that bearing witness to those outside involves the verbal telling of the gospel truths to others (e.g. Rom. 10: 14-15; Col. 4: 3-6). Of course, in the Philippian text, both concerns for the content of the gospel and for its "spread and growth" among all peoples

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[266] This phrase referred to the "tactical device" employed by Philip of Macedon and Alexander the Great in which the body of soldiers formed close, compacted ranks called a phalanx (Martin 1987: 88).

[267] As Fee observes, this evangelistic sense is evident from Paul's use of the verb to strive in Phil. 4: 3 where its context is his struggle alongside others for the furthering or spread of the gospel (Fee 1995: 166). This view finds additional support in the pericope, for as Section 10.3 will show, the community's unity and love had a missionary purpose, even towards their enemies, for whom it served as proof of their need turn to Christ.

[268] Lincoln is here referring to the letter to the Ephesians where there is also a repeated emphasis on Christian unity (Lincoln 2003: 137-138).

(O'Brien 1991: 152) fit with what is known of Paul.

The theme of unity and its relation to the external witness of the church to those who do not believe is seen most explicitly in the Johannine gospel. In John 17: 20-23, Jesus prays that believers will be united:

> *I ask not only on behalf of these, but also on behalf of those who will believe in me through their word, that they may all be one. As you, Father, are in me and I am in you, may they also be in us, so that the world may believe that you have sent me... I in them and you in me, that they may become completely one, so that the world may know that you have sent me and have loved them even as you have loved me.* (John 17: 21, 23)

As George Beasley-Murray says, although the theme of unity between believers reaches it "highest expression" in John 17, it is evident throughout the Johannine gospel (Beasley-Murray 1991: 112).[269] It is a oneness for which the unity of Son and Father is its exemplar and source: *"As you, Father, are in me and I am in you"* – a unison which is rooted in and flows out of the unity that exists between the Jesus and the Father.[270] As Rodney Whitacre says: "The oneness of the Father and the Son is both the cause of, and the model for, the believers' unity" (Whitacre 1999: 417-418). The context of the passage indicates that it is in a unity mediated through love that believers come to reflect and imitate the relation of Father and Son – *"that the love with which you have loved me may be in them"* (Jn. 17: 26). Thus, Don Carson says that it is by the "unity of love" that the community is "analogous to the oneness that Jesus enjoys with the Father" (Carson 1991: 568). Already there are resonances with the Philippian text where the unity of believers in self-giving love, in the imitation of the Divine, is intended.

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[269] For instance, believers are described as *"one flock"* under *"one Shepherd"* in Jn. 10: 16 and they were gathered into being one people in Jn. 11: 51-52 (Beasley-Murray 1991: 111-115).

[270] This is the view of, for example, Whitacre (1999: 417), Milne (1993: 247), Beasley-Murray (1987: 302) and Tasker (1960: 189).

Yet, it is not only in its internal relations that there is consonance with the Philippian text, but also in the wider purpose within which this communal oneness is set. In the Johannine text, this unity is *"so that the world may know that you have sent me"*. Indeed, as Beasley-Murray notes, in both vv. 20-21 and 22-23 the petitions for the unity of the Church conclude with virtually identical words *"so that the world may know/believe"*; there is a repeated call for the unity of the church to act as a witness to the surrounding unbelieving world bringing them to faith (Beasley-Murray 1987: 303). It is a unity which is set by the prayer of Christ within a missionary context for, as Rudolf Bultmann observes, it opens "the possibility of faith for the world" (Bultmann 1971: 513-514; see also Barrett 1978: 512). This point is reiterated by Bruce Milne, who says of the text, "the unity of the church is evangelical. It is a unity which is derived from the witness of the church, and which produces faith on the part of at least some of those who encounter it" (Milne 1993: 248).[271] This meaning is also seen in Jn. 13: 34-35: *"I give you a new commandment, that you love one another. Just as I have loved you, you also should love one another. By this everyone will know that you are my disciples, if you have love for one another"*. It is through the self-sacrificing love and unity in the church that Christ is "observable" to the world (Carson 1991: 568). As William Barclay notes, it convinces "the world of the truth of Christianity and of the place of Christ" (Barclay 1957: 255). This is also the view of Rudolf Schnackenburg and Barnabas Lindars, the latter of whom says that the unity and love within the community "displays and effects God's love for mankind" (Lindars 1972: 531; Schnackenburg 1982: 191). The existence of the community, its cohering and radical love for one another, cannot be separated from this external purpose. Indeed, Randolph Tasker rightly notes:

> The society of the Church has been created by God for a specific purpose. Its raison d'être is to convey to the world the revelation imparted by Jesus, and to reflect the self-sacrificing love manifested

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[271] As indicated in the quotation from Milne, only some will accept this witness, for with it comes also "the possibility of a decision against" faith in Christ (Bultmann 1971: 513-514).

by Jesus on the cross. (Tasker 1960: 189)

Thus, in the Johannine texts, as in the Philippian text, the quality of the relationships within the community, its internal altruistic love, is a witness to the reality of Christ and God to those in their societies. The believers' love for one another is an emblem of divine love to a watching world. So, when the group of believers is expressing its internal commitments of loving one another, it is also serving as the divine invitation to those outside. The sociobiological view of in-group morality and out-group hostility is shown as entirely misplaced as the very purpose of internal unity and love is its orientation to those outside. The point should not be missed that this invitation is, by consequence, a welcome into the community of Christ.[272] The boundaries of this group are fully permeable – its witness is so that others may enter into and join in with its communal life. If one was looking for the criteria of group selection, they would not be found in the NT texts, due to the fact that the internal loyalties exist, in part, for the purpose of outsiders, and because of openness of its boundaries in its constantly welcoming and absorbing these others.

Yet, the obligation of believers to those outside of the community does not only take the form of a secondary witness stemming from its internal love, but believers are also required to proactively love those outside of their communal bounds. This relates to the second issue raised by the sociobiological critique – the argument that NT altruistic love is expressed only toward in-group members. The NT teachings are clear that this is not so, for care is not to be restricted to those within the social grouping of the church community. Paul requests in 1 Thess. 5: 15 that the community "*always seek to do good to one another and to all*". In the same way in 1 Thess. 3: 12, it is his prayer that *"the Lord make you increase and abound in love for one another and for all"*.[273] The believers are to *"be ready for every*

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[272] The witness of this internal love to those outside, and their consequent entering into the community, is also indicated in texts like Acts 2: 42-47.

[273] Jesus' command to love one's neighbour will be shown in Section 10.2 to have this

good work, to speak evil of no one... to be gentle and show every courtesy to everyone" (Titus 3: 1-2).

As Herman Ridderbos says "it is evident in various ways that Paul extends the commandment of love as widely as possible and that every suggestion that this commandment holds only for Christians themselves is entirely foreign to him", it is a "universal love" (Ridderbos 1975: 299). This love undoubtedly has its root in the divine love revealed in the Christ who died for all (e.g. 1 Tim. 2: 5-6; Ridderbos 1975: 300), and who particularly reached out to those excluded from society – the prostitutes, tax collectors and Gentiles (Mk. 2: 16; McGrath & McGrath 2007: 54). R. T. France rightly says of Jesus' love, and his teachings on love, that they go beyond the bounds of the internal group to include those furthest away – it is an "undiscriminating" love in which "there is no-one the disciple need not love" (France 1985: 128). It is a call for a universal love, which is not restricted to one's group, but is extended to all (France 1985: 129), and which embraces even the enemy (discussed in Section 10.3). So, Hans Betz observes "the Christian community is obliged to disregard all ethnic, national, cultural, social, sexual, and even religious distinctions within the human community" in its love for all humankind (Betz 1979: 311; also McKnight 1995: 288). This is a point to which Patricia Williams is rightly attentive, for she sees the love in the NT as clearly transcending the group boundary (Section 7.3.2). This universal love contrasts with Stephen Pope's characterisation, which tends to cast the limits of even Jesus' love to group members (Section 7.3.1).

Nonetheless, there is at least one text in which the community of faith was seemingly given priority in the command of love. As was mentioned in Section 9.2, Paul says in Gal. 6: 10: *"So then, whenever we have an opportunity, let us work for the good of all, and especially for those of the family of faith"*. Even here, however, the exhortation of benefiting others with

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same fullness, which included everyone in its remit of care.

the *"good"*[274] is directed to *"all"* (*"pantas"*) – it is "all-embracing" (Longenecker 1990: 283). As in the previous texts the meaning is evidently that there is no one who is not to be embraced within the NT circle of love. Yet, this exhortation concludes with the emphasis of this love being toward the believers. This is seen by some like Richard Longenecker as reflecting a required priority of the love for believers over others (e.g. Longenecker 1990: 283). In contrast, those like Ridderbos suggest that the distinction between the love for believers and non-believers "does not point to a first and second 'rank' of love… but to a differentiation of fellowship" as there is not the same sense of solidarity as that which exists between believers (Ridderbos 1975: 300). Victor Furnish also takes this view although he does not suggest that the differentiation in the text stems from issues of fellowship, but that the apparent priority simply presents "the beginning point of love"; it directs believers to where they should start with showing this love, namely to other believers, but not the "farthest extent" of this love, which should be outworked in a love for all (Furnish 1968: 204). It may be that the tension in the text can be resolved by returning to the point made in the first part of this section for if there is priority of love for believers, this exists not just for its members but as a witness and an open door to those from without.

In this section, the character of altruistic love in the NT has been examined in the light of the group of believers and their relation to those outside of the church. As the discussion has shown, there is an internal altruism but it is one that is presented as an external witness of God's love to those outside the group, and an invitation to enter. By their love and unity, believers are the tangible and observable evidence of divine love to the surrounding world. When the church fails in this regard, the loss is also borne by those outside of the community who, thereby, can see nothing of love of Christ in the community to attract them to its Lord. So, Ralph Martin rightly says: "It is only as the church is true to its name, and embodies in its corporate life the

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[274] The term is *"agathon"* which literally means "good things", and conveys the general and practical sense of benefiting others in every way (Longenecker 1990: 283; Longenecker 1998: 80).

gospel it professes and preaches, that its impact upon the non-Christian world will be effective" (Martin 1959: 82). Yet, believers are also bound to exhibit an altruistic love in their treatment of those outside of the community. They are to love and seek the good of all others, without exception. This is also part of their faithful witness to, and participation in, the love of the Divine. So, while humans evidently form exclusive societies that are bonded by internal loyalties and are antagonistic to non-members, it has been contended that the church, as seen through the NT texts above, is not to be one such as this.

9.4 Conclusion

This chapter has argued that the altruistic love for others in the NT, to which believers are called, is an expansive care that encompasses all others. As Section 9.2 has shown, this includes the natural family, for the believer is required to care for such kin. This is no discredit to the faith as is indicated by the importance of care within this sphere for the very thriving of human individuals and the species as a whole. Yet, through the symbolic usage of familial terms, this love is also extended out to the new family formed through Christ, the community of the church. This symbolism transcends the sociobiological limits of natural kin, as this communal family includes and unites those of all genetic, clan and ethnic origins. The familial terms also contribute to an intensification of love in this new context. The kinship titles, by drawing implicitly upon the intimacy that naturally exists within the immediate family, sets this as the context for relations between Christians. Believers, even if of diverse ethnic backgrounds, are not aliens but ones with whom there should be the same kind of closeness that is seen in natural family. The nature of love is further endorsed by the familial ascriptions to God as Father and Christ as brother and head of the household of faith. As there inheres in humans a biological nature that seeks to imitate senior family members, these attributions to God and Christ implicitly deepen the drive for believers to emulate them in the altruistic love for one another. While there may be indications in the NT texts that the new family has precedence over the natural one in matters of loyalty and love, it is perhaps best to see them not in terms of being in conflict, but as a dual set of obligations upon believers.

Yet, as was contended in Section 9.3, the expansion from natural kin to communal kin is by no means the furthermost limit of NT love. Indeed, if it were, this would mean that the altruism in the texts bore the characteristics of group theory, where love is constrained to members only. This is not the case as is clear from the investigation of the NT passages discussed above, where the internal love within the community was shown as directed both toward its members, and also as an invitation and witness to those outside. It was to be evidence of the reality of divine love and was to draw outsiders toward the source of this love, the Divine, and consequently into the community. Such an internal love, which exists in part for those outside, and whose bounds of membership are so permeable that all are welcome, is far from in keeping with the traits expected from group selection. Moreover, the relation of believers to outsiders is not restricted to this secondary effect, for believers are called to love *all* others, to seek the well-being of *every* person whether inside or outside of the community. This is a calling that the next chapter will further endorse, for believers are required by the NT teachings to care both for those who are in need in their own community, as well as for that most estranged of outsiders, the enemy.

Chapter 10: A New Testament Response to Sociobiology's Category of Reciprocal Care

10.1 Introduction

This chapter critically examines the NT commands for the love of others in the light of the sociobiological view that relationships with non-relatives are characterised by reciprocal interests. It starts in this section with a review of the arguments presented concerning reciprocal 'altruism' in the prior chapters of this thesis. In reciprocity, as sociobiologically defined, the material costs of any benevolent actions, in which the well-being of another is promoted, are outweighed by the benefits that ultimately accrue to the 'altruist' (Chapter 5). This may be mediated directly through the return of favours or indirectly by the enhanced public image that comes from giving to the needy. In the latter case, there is a long-term benefit from this public reputation, as more individuals will be inclined to give to, and enter into, reciprocal relations with such an 'altruist'. Thus, reciprocal care is motivated, either by a seeking of direct returns, or by a concern for public repute. It is also envisaged by sociobiologists as leading to a pervasive cheating in which reciprocal gains are sought without the bearing of any costs.

In Sections 5.4-5.5, it was argued that while humans do indeed naturally engage in reciprocation, they do so primarily in economic contexts where objects/items are being exchanged. In fact, even in such economic situations, human behaviours go beyond reciprocal interests in pursuing, for instance, fairness in trade at overall cost to the self (Section 5.5). Certainly, in personal contexts, which relate not to commodities but directly to human individuals, the human tendency is not to find reciprocation as an acceptable motive but instead there is an expectation that the relationship will be founded on genuine psychological altruism. This is not to say that humans do not seek prestige and cheat in such personal situations in order to benefit their own well-being at the expense of others (an egoism that might have little or nothing to do with reproductive-replicative interests). This, however, is not normally seen as an acceptable standard nor is it innately necessary. Sociobiologists themselves make no such distinctions in context and see reciprocation as pervading all human relationships with non-relatives.

Moreover, sociobiologists consider that the NT teachings are directed at facilitating such reciprocal ends. As Sections 7.3.1-7.3.2 have shown, the theologians, Stephen Pope and Patricia Williams, both accept the sociobiological view that even personal relationships are commonly characterised by reciprocity, but they differ as to how this relates to the NT. According to Pope, the NT endorses this reciprocity, albeit in a more altruistic form than sociobiologists themselves allow. Williams, however, sees the NT as requiring a love for others that is marked by its very contrast to reciprocity, one that goes far beyond any sociobiological Tit for Tat. In fact, while the NT assumes the acceptability of reciprocation in economic situations (e.g. Rom. 4: 4),[275] given that the texts are primarily concerned with personal relationships, it is perhaps not surprising that, as this chapter will argue, it is Williams' view that is the most compelling. Indeed, in the sections that follow, the non-reciprocal nature of NT love will be evident in the altruistic regard that is required toward two types of individuals who, although in very different ways, are non-reciprocators. The weak, those who are socially and materially disadvantaged such that they lack the resources to return any benefits, are not only included in Christian care but are given a priority within it. The other is the enemy, the one who may have resources to reciprocate but who has no intention to do so. Whilst previous reference has already been made to the love of enemy (see Section 7.3.2), and the care for the weak has been discussed somewhat through the examples of Jesus and Mother Teresa in Section 7.2, there are further insights into these issues which only appear on closer scrutiny of the NT. There are texts that address such matters as

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[275] See also the use of the phrase *"the worker deserves his wages"* which, while applied in a spiritual sense in 1 Tim. 5: 18, presumes upon the correctness of reciprocity in matters of economics and labour exchange.

whether the care for the weak can be used for public advantage, and whether the love for the enemy is in any way conditional. The fully radical nature of these non-reciprocal loves is shown through the exegetical attentiveness in the sections below. Finally, this chapter would not be complete without addressing the issue of rewards, for the commands to love those like the poor and the enemy, are often followed in the NT by the promise of a heavenly reward. This view may suggest, at first glance, the ultimate self-interest of such altruism, but, as Section 10.4 will contend, the reward is rather the promise of the perfection of other-centred love in the believer.

10.2 Reciprocal Altruism: Its Transcendence in the Special Priority of the Weak

It is likely that among the believers in the Philippian church there would have been a number of slaves. This was true of other churches such as the congregations in Ephesus (Eph. 6: 5-9), Colossae (Col. 3: 22-4: 1) and Corinth (1 Cor. 7: 21).[276] In the Greco-Roman culture, slavery was an integral part of the society, with much of the labour, including skilled labour, being carried out by slaves. Their status in first century society was apparently understood in accord with Aristotle's definition of them as "living property" and "human tools" (see Witherington 1995: 181; Rupprecht 1993: 881) – they were subject to the demands and will of their owners and were largely without legal rights (Rengstorf 1964: 261f). Slaves were amongst the lowest and most powerless in this ancient society. Whilst the issue of whether or not Paul founded a theological principle for the disestablishment of slavery is much debated,[277] it is evident that in these congregations, Paul considered slaves to be equal members within the Christian community. It is on the matter of the slave, Onesimus, that Paul writes to Philemon, Onesimus' owner (Philem. 10f). Paul's acceptance of the believing slave as an equal in the family of God is clear from his reference to Onesimus as a *"beloved brother"* in Christ and one whom Philemon should receive in the same way

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[276] Further references to slaves within the Christian congregations can be seen in 1 Tim. 6: 1-2 and 1 Pet. 2: 18-21.

[277] The various views often put forward are discussed by John Barclay (1991).

as he would Paul himself (Philem. 16, 17). In fact, Paul explicitly requires in Eph. 6: 9 that there be mutuality between slaves and their owners.[278] This shared status in Christ is evident in the refrain of Col. 3: 11 *"there is no longer Greek and Jew, circumcised and uncircumcised, barbarian, Scythian, slave and free: but Christ is all and in all".*

According to those like Rengstorf, the acceptance of slaves into the community of the church as full and equal members was a radical departure from the social Greco-Roman norms of the day (Rengstorf 1985: 183-184). The nethermost of society were shown as having the same status in Christ as those who were privileged Roman citizens and/or free men. God had set his love and grace on each regardless of their origins and place in society. While this levelling was both regal and celestial, an elevation to the "*heavenly places* for those who will *"reign"* with Christ (Eph. 2: 6; 2 Tim. 2: 12), it was also lowly and humble. The Lord of all, the Son and Head of the community, had been revealed through his voluntary serving of others in *"the form of a slave"* (Phil. 2: 7b – Section 8.4). This identification of Christ's serving nature with the slave was the patterning model of Christian believers in the Pauline writings and in the gospels as Section 8.4 has shown. All members of the community were slaves to the interests and well-being of others. This is clear in Gal. 5: 13 which requires of its readers that they do not seek *"self-indulgence but through love become slaves to one another".* This had important implications with regard to matters of reciprocation, for it meant that the attitude of slavehood was to be common to those who had high status and wealth, and those who, at the other end of the spectrum, were literally slaves in the society, and who had neither social position nor potentially the material resources to return favours.[279] So, NT love was a binding commitment of a deeply self-giving and practical altruism (see

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[278] That this was Paul's own view is evident, not only in Philemon, but in Rom. 16, where among those listed as his co-workers in the gospel are Andronicus and Urbanus – names which in the period of Paul's writing were only given to slaves (Rupprecht 1993: 882).

[279] Many would have been poor, although not all, as the law allowed some slaves to accumulate money and property (Bartchy 1973: 41-42; Rupprecht 1993: 881).

Chapter 8), which was not just between peers who could reciprocate but between those of unequal social and economic status. While there is no stipulation in the Pauline letters for assistance to slaves specifically, there is a general requirement that believers be liberal and generous in their giving to one another (e.g. 2 Cor. 9: 5-12). Notably, there should be no reputation gains from any charitable giving, such as that proposed by reciprocation theory, for not only are believers prohibited from self-promotion and vain glory (Phil. 2: 3 – Section 8.2), they were to see themselves as sharing equally in the benefits of the grace of God, and in the lowly and humble status of slaves. This context indicates that there was to be no differentiation of the community into superior patrons and inferior needy individuals.

The widows and the poor, like slaves, are also to be listed among the powerless in the ancient society (e.g. Morris 1992: 135). The former were without the public protection and income provided by a husband, and both were subject to disadvantage, which apart from economic hardship, involved a low status in society and a vulnerability to exploitation. Early in the life of the church, priority was given to the care of such individuals – financial support was supplied to those in need (Acts 4: 35), and a register was organised to specifically ensure that widows were provided for (Acts 6: 1-6). These practices were continued in the churches established under Paul. As the text of 1 Tim. 5: 3, 9 has already indicated, widows who were without family support were to be assisted by the community (Section 9.2). In a very practical fashion, a list of such widows who required aid had been prepared for the church at Ephesus (1 Tim. 5: 9). The concern for the poor is evident throughout the Pauline epistles which repeatedly request that believers share with those who are in need (e.g. Rom. 12: 8, 13; Eph. 4: 28; 2 Cor. 8: 2f.; 9: 5-12).[280] In 1 Tim. 6: 17-18, this requirement is particularly directed at the wealthy: *"As for those who in the present age are rich, command them not to*

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[280] This priority of the weak is also applied in a spiritual sense in the Pauline corpus. Within the church, Paul was concerned that those strong in the faith did not use their sense of freedom in Christ to undermine, in any way, those who were of a weaker conscience or faith (1 Cor. 8-10; Rom. 14-15).

be haughty... They are to do good, to be rich in good works, generous, and ready to share". In fact, an important aspect of Paul's ministry was a monetary collection from the Gentile churches for the congregation in Jerusalem which was experiencing poverty (Rom. 15: 25-28; Acts 11: 29-30; 24: 17; Gal. 2: 10).[281] By far the most detailed directives given by Paul for this collection are in 2 Cor. 8-9, where he emphasises that believers should show generosity in their giving to those in need (2 Cor. 8: 7). He identifies the desired outcome as that of an equality where the wealthy supply the needs of those without (2 Cor. 8: 13-15; Kruse 1987: 157-158; Bruce 1971: 223). Other apostolic writings also show a particular concern for the care of the poor (e.g. 1 Jn. 3: 16-18; Jas. 2: 1-3, 14-17) and for widows (Jas. 1: 27)[282].

Thus, those not able to reciprocate material benefits were to be given priority in the work and resources of the church. Again, this was not a high-handed patronage towards inferiors to elevate the status of the benefactor, for, as with slaves, nowhere is a distinction to be made in the dignity between those in need and the wealthy (see especially Jas 2: 1-4). It is of note, however, that in some instances of this giving, a promise of a heavenly reward is proffered. So, for example, the obligation of the rich in 1 Tim. 6 concludes with the assurance that by giving generously, they are *"storing up for themselves the treasure of a good foundation for the future, so that they may take hold of the life that is really life"* (1 Tim. 6: 19; see also 2 Cor. 9: 6). While the issue of rewards will be taken up in Section 10.4, it should already be noted that there are texts that make clear that the motivation of such assistance is not a self-centred compensation, but an other-centred love. This is especially evident in 1 Cor. 13: 3 which states that even if believers are to *"give away all"* they possess to the poor but *"do not have love"*, they

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281 Whilst the term "poor" was used in the first century as a general reference to the lower classes and to religious humility in Jewish piety, it also referred to economic hardship which is its evident meaning in the Pauline texts as the collection was a monetary one (Ziesler 1989: 345; Longenecker 1990: 59-60). This poverty may have been due to the loss of familial support upon conversion (Dunn 1988: 881-882), poor harvests (McKnight 1995: 87) or even the financial burden of caring for an increasing number of widows (McKnight 1993: 144).

282 The provision for the widow and orphan, as for the poor and the foreigner, is repeatedly stipulated throughout the OT (e.g. Deut. 10: 17-19; 24: 19-22).

would *"gain nothing"*. The believer can be in no doubt as to the motivation for their deeds which Paul immediately describes in the verses which follow as *"kind"* and in no way self-seeking – one that does not "seek its own advantages" or "interests" (1 Cor. 13: 4-7; Conzelmann 1975: 224; Collins 1999: 480). Roger Mohrlang says of the text: "Loving others is not simply a matter of doing good... but is to spring from a genuine care and compassion" (Mohrlang 1993: 577). As in Phil. 2: 3-8, such aid is to come from a self-giving love for the other.

The concern for the weak and powerless is also reflected in Jesus' earthly ministry and teachings particularly in the Lukan gospel. He is shown as exhibiting compassion toward the widows, the poor and to those disabled by disease and congenital disorders (Lk. 4: 40-41; 7: 9-22; 12: 32-33; 20: 47). His ministry is directed toward the spiritually poor – prostitutes and tax collectors – who were regarded as the outcasts of religious Judaism, but whom Jesus befriends and to whom he takes the gospel (Lk. 5: 29-30; 15: 1f). In fact, such a priority in the care for non-reciprocators is specifically addressed in Jesus' command to his followers in the Lukan gospel:

> *When you give a luncheon or dinner, do not invite your friends or your brothers or your relatives or rich neighbours, in case they may invite you in return and you would be repaid. But when you give a banquet, invite the poor, the crippled, the lame and the blind. And you will be blessed, because they cannot repay you, for you will be repaid at the resurrection of the righteous.* (Luke 14: 12)

The moral injunction is laid down in the challenge to the believer not just to care for her/his family and friends, those already expressing a care for the believer,[283] nor the rich who have material wealth sufficient to easily return any favours. Followers of Christ are instead to show a generous concern for those who are in most need of assistance and who cannot reciprocate. As Darrell Bock says of the text, the way of Jesus involves attending to those

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[283] The expression of psychological altruism in relationships with family and friends has been noted in Sections 4.4, 4.5, 7.3.1 and 9.2.

poor and powerless who "cannot repay the favour" (Bock 1994: 251). There is to be "no thought of reciprocal gain", no "calculated self-interest" or "selfish recompense" (Nolland 1993: 750, 751; Fitzmyer 1985: 1045). This does not mean that such persons as natural kin were to be excluded from the believer's circle of care; this is counter to Jesus' teachings on the family as was discussed in Section 9.2. The teaching instead makes clear that care should not be constrained only to such as these but that priority is given according to need.[284]

This teaching of Jesus is no mere hyperbole as Michael Ruse suggests (see Section 7.2) for the list given of those to whom generosity and care is to be shown, the poor and disabled, parallels Jesus' own description of his ministry as recorded in the gospels (Luke 7: 22; 4: 18; Johnson 1991: 229). It is to precisely such vulnerable individuals that Jesus directed his own care, and he clearly expected no less from his disciples. So, while Ruse, and even Pope, placed the emphasis of care upon the sociobiological circle like reciprocators, the bias indicated in the NT texts above is toward those in greatest need, those unable to make returns. Yet, not only does the Lukan teaching of the luncheon for the poor specifically show the priority of non-reciprocators (Lk. 14: 12f), the character of such care is also indicated in the text which immediately precedes it. As Eduard Schweizer observes, the luncheon scenario is introduced first in Lk. 14: 7-11 where it requires of believers that they should not be those who seek honour for themselves, the public recognition of their own worth, but rather who in humility are more mindful of the value of others (Schweizer 1984: 236). This is a disposition of humble, other-centredness, which clearly parallels that described in Chapter 8. So, in this gospel text, the care of others, specifically non-reciprocators, is set in the wider context of a humble, other-regard that contrasts with reputation seeking. In this care of non-reciprocators, there is no human

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[284] As was mentioned in Section 4.5, human infants begin life in a prolonged state of dependency. Thus, it seems reasonable to assume that through natural selection, human nature has come to recognise the cues of helplessness and respond with empathetic concern, and that this has enabled humans to express compassion for others who show such signs of weakness whether infants or needy adults.

reward, either in direct material gain or in public prestige, but only the reward that is the bestowed blessing from God (Fitzmyer 1985: 1045; Nolland 1993: 751; for discussion of rewards see Section 10.4).

The care for such non-reciprocators like the poor, lame, widows and spiritual outcasts is also seen in the other gospels (e.g. Mt. 11: 5-6; 19: 21; Mk. 2: 16; 12: 40).[285] Indeed, the nature of this non-reciprocal care, which is not to seek the notoriety and public recognition that is characteristic of reciprocal theory, is perhaps most clearly indicated in Jesus' instruction on giving to the poor in the Matthean gospel which reads:

> *So whenever you give alms, do not sound a trumpet before you, as the hypocrites do in the synagogues and in the streets, so that they may be praised by others. Truly I tell you, they have received their reward. But when you give alms, do not let you left hand know what your right hand is doing, so that your alms may be done in secret; and your Father who sees in secret will reward you.* (Mt 6: 2-4)

In first century Judaism, provision for the poor was an important Jewish religious duty and giving came both through legislated levies and through individual philanthropy (Morris 1992: 135; Harrington 1991: 94). As poverty within this period was both widespread and at times severe (Morris 1992: 135), the benefiting of the poor was often recognised by a public honouring in which the givers would be called to stand up at the front of the synagogue alongside the rabbi (Bruner 1987: 231). This public recognition fostered, no doubt, a motivation in such generosity that was concerned with one's own reputation (Hagner 1993: 138) – the self-interested giving in line with indirect reciprocity.[286]

In contrast, Jesus' requirement of his followers is that they give to the poor and do so generously, *and* that their motivation will not carry this element of

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[285] See also: Mt. 10: 8; 15: 29; 12: 15-22; 14: 14; 19: 21; Mk. 1: 32-33, 40-41; 2: 1f; 6: 12; Jn. 5: 3f; and 6: 1-2.

[286] Although this was, of course, much more likely to have been driven by egoism than the sociobiological outcome of reproductive-replicative interests.

self-interest. They were not to be *"hypocrites"*, a term that literally meant to be an "actor", with the sense that they were not to feign or pretend at caring for the poor (Smith 1989: 106). They were to express a genuine concern for these others and not to be "like one wearing a mask" (Harrington 1991: 94), who "performed to an audience" (France 1985: 131). In contrast to those who were:

> more interested in ensuring that they were known as benefactors than in genuinely helping the poor; [where] reputation rather than relief of poverty was what mattered to them. Jesus teaches it is important to give, not to be known to give. (Morris 1992: 135-136)

Indeed, such actions were to be done in secrecy and even the self was not to dwell on the goodness of the action – *"do not let your left hand know what your right hand is doing"* (Mt 6: 4; Harrington 1991: 94; Morris 1992: 137). There was to be no pondering on one's own beneficence – as John Stott says of the text: "Christian giving is to be marked by self-sacrifice and self-forgetfulness, not by self-congratulation" (Stott 1978: 131). It should be noted that this motivation is required *"whenever"* such a deed is undertaken, indicating that it is comprehensive, there is no time in which the self-centred motivation is appropriate (Morris 1992: 136). While this teaching is specifically given with regard to alms giving, it is to be understood as the motivation that is required in all acts of serving others (Bruner 1987: 230-231). All such deeds were to have an other-centred focus which evidently transcended reciprocal benefits and which was oblivious even to self-praise. So, the sociobiological view, of those like Alexander, that NT morality is about ensuring one's public prestige, and consequently reciprocal gains (Section 7.2), is not supported by this text nor, indeed, by any others considered in this and the preceding sections.

What then of Jesus' teachings which are specifically interpreted by sociobiologists in reciprocal terms, that of loving one's neighbour as oneself and the Golden Rule of doing to others what you would have them do to you? As the love commandment is especially pivotal for understanding the nature of human relations in the gospels, for Jesus endorsed it as fulfilling all the law and the prophetic writings of the OT (Mt. 22: 37-40; Lk. 10: 26-27; Mk. 12: 28-3)[287], the matter is an important one. Certainly, the text indicates that individuals are naturally aware of, and concerned for, their own needs and feelings – there is an assumed self-regard (e.g. France 1985: 320). What the text by itself implies is that this natural hedonistic attentiveness to the self should be in the same measure, to an equal extent, extended toward others. While there is evidently no denial of love for the self and acting out of the self's interests, the requirement is that, at the very least, the same degree of concern be directed to others. One might express it as a command to take the needs and feelings of others upon oneself personally as if they were one's own. In fact, this is underlined in Jesus' description of neighbour love in the parable of the Good Samaritan which follows in the Lukan text (Lk. 10: 29-37). For the one who loved the neighbour, was the one who had *"compassion"* (v. 33), that empathetic sense which, as John Nolland notes, "causes us to identify with another's situation such that we are prepared to act for his or her benefit" (Nolland 1993: 594). As was mentioned in Section 7.2, this is radical enough for a reciprocal view, which is concerned with benefits to the self, for the command requires that, through empathy, the attentiveness to the other is placed, at least, on a par with the self. The question is, of course, to whom these gospel texts consider that priority is given in times of conflicting interest – the self or the other? If one takes the parable of the Samaritan then this neighbour love indicates that the cost is borne by the self.[288] If one considers Jesus' own example in his life, then it is the other who is again given precedence – for Jesus' entire ministry is shown to be not for his own benefit but for those whom he came to serve (e.g. Mt. 20: 28; Mk. 6: 31-34; Section 8.4). The neighbour, and not the self, takes priority in the love command. This is, of course, in keeping with the meaning

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[287] The command to love one's neighbour is taken from Lev. 19: 18 (e.g. Hagner 1995: 647).

[288] The Samaritan took the risk that the robbers might return, and gave of his time, energy and finances in the care of the individual; the self-denying character of the Samaritan in the light of Sociobiology is explored at some length by Holmes Rolston (1999: 248-249, 252ff).

of the Philippian mandates and wider Pauline teachings discussed in Chapter 8 where the priority also is upon the other over self.

Indeed, it is the priority of the other that Paul interprets as the gospel teaching of neighbour love. James Dunn and Charles Wanamaker are among those who see the reference to the care of the *"neighbour"* in the Pauline writings as reflecting Jesus' own teachings of the love commandment (Dunn 1998: 654-655; Wanamaker 1990: 160; also Smith 1989: 265; Hagner 1995: 647). Paul is clear in texts like Rom. 15: 1-3 that this concern for the neighbour involved giving precedence to the other, for he says, we *"are not to please ourselves. Each of us must please our neighbour for the good purpose of building up the neighbour. For Christ did not please himself"*. In Gal. 5: 14, Paul repeats the command to *"love your neighbour as yourself"* and he situates it in the context of the requirement that the Galatians are not to live by *"self-indulgence, but through love [to] become slaves to one another"* (Gal 5: 13). Thus, the love command for both Paul and Christ, in contrast to reciprocal theory, is not concerned primarily with the self but with the other. It should be noted that, in the Pauline writings, this love for others includes those outside of the church. Indeed, both letters cited here make this explicit for it is the good of *all* that is to be sought, one which includes the enemy (Gal. 6: 10, Rom. 12: 14, 17-21 – discussed in Section 10.3 below). This is also seen in Jesus' own instruction in the story of the Good Samaritan, where the neighbour to whom one is bound is not simply those of one's own community, for the parable transcended the deep enmity that existed between Jews and Samaritans. It indicated that the "demand for love of neighbour should bridge to any needy human being; that its practice should not be restricted to a closed community" (Nolland 1993: 595). "Love's 'work' is defined by the neighbour's needs" whosoever that neighbour may be (Furnish 1968: 204-205). Hence, the expansive and compassionate care for the other indicated in the love commandment supersedes notions of reciprocation.

Given that the Golden Rule is thought to be a further explication of the love command,[289] it is perhaps not surprising that, as the discussion will now show, the other-centred meaning of the command applies also to the Rule. This text which is found in Mt. 7: 12 (also Lk. 6: 31) reads: *"In everything do to others as you would have them do to you; for this is the law and the prophets"*. The requirement is that the follower of Christ should be active in doing the good to others that they themselves would appreciate being done to them.[290] The sociobiological rendering of this Rule is that this doing good is *in order that* the benefit may be returned (Section 7.2). This self-centred focus is not indicated in the text but rather, once more, it is a sensitivity to the needs and experiences of others that is the thrust of its meaning. The Lukan text again uses empathetic terms, for the Rule is correlated with the imitation of God who is *"kind"* and *"merciful"* (Lk. 6: 35, 36). As Frederick Bruner describes the Rule: "In personal relations, all that believers need usually consult is their own feelings – how would I like to be treated in this situation? – and in answer to this question one has a rule" (Bruner 1987: 280). So, the text is concerned with the self's understanding and appreciation of others. This other-centred focus is underlined in the absolute requirement of the Rule, for the circumstance for such an attitude toward the other is literally in *"everything whatsoever"* – it covers every and all situations (Hagner 1993: 176). The significance of this is again seen most acutely in the Lukan text where this regard for the other is extended to the enemy (Lk. 6: 27-30). Here, the Rule is applied to loving one's enemy, both in terms of generous giving and in the non-retaliation to their evil; there is both the doing of the good, which the enemy deliberately omits to do in return, and the non-repayment of the evil that the enemy does do. The Rule is clearly in no way reciprocal (Evans 1990: 335-337; Schweizer 1984: 123). Whilst the issue of loving one's enemy will be discussed further in Section 10.3 below, this context shows that the teaching is evidently about treating others in the way the self

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[289] This is the view of those like Schweizer (1984: 123-124), Hagner (1993: 176) and France (1985: 145).

[290] The negative form of this command, as not doing that which one knows to be harmful, can be seen in a number of cultures including ancient Judaism and Greco-Roman culture. Seemingly, Jesus was one of the first to express the command in this positive form as actively benefiting others (Morris 1992: 173; Mounce 1991: 66).

would want to be treated, *regardless* of how the other treats the self in return. As John Nolland rightly says of the text "one's actions to the other should be determined not at all by the actual behaviour of the other, but only by what one would recognize as the good if one were on the receiving end" (Nolland 1989: 298). As Morris concludes of the love commandment and the Rule: "Both ways of putting it totally exclude selfishness and stress a proper attitude of love and care for others" (Morris 1992: 172-173). It is a call, not to reciprocity, much less to egoism, but to a deeply altruistic love, which gives priority to the other.

In conclusion, the NT writings taken from both the epistles and the gospels demonstrate that there are, indeed, priorities in its envisaged altruism. Yet, these are not the precedence of self over others, nor of reciprocators over non-reciprocators. It is, rather the converse, for others are given pre-eminence over self, and of these others, special attentiveness is given to the weak and powerless who are not able to reciprocate. Thus, instead of the bias toward the sociobiological circle of intimates, it is a system of preference that recognises need as a distinguishing criterion; one that makes its priorities based on the degree of need being experienced by the other. Further, the sociobiological view that any such show of benevolence in the NT is a way of establishing a public reputation which will ultimately outwork itself in benefits to the seeming 'altruist' is directly countered by the NT texts considered in this section. The followers of Christ were not to call the attention of others to their charitable acts, nor even to allow the self to dwell upon such deeds. The only reward that the believer can expect is not from others, nor even from the self, but from God who knows both what is done in secret and the motivation of the heart. So, this section has shown the expansive nature of altruism in the NT texts, it is a love which makes the weak its priority, and is not even withheld from the enemy – a point taken up in the section which immediately follows.

10.3 Reciprocal Altruism: Its Transcendence in the Love for the Enemy

"Only, live your life in a manner worthy of the gospel of Christ, so that... I will know that you are standing firm in one spirit, striving side by side with one mind for the faith of the gospel, and are in no way intimidated by your opponents. For them this is evidence of their destruction, but of your salvation. And this is God's doing" (Phil. 1: 27-28)

The text of Phil. 1: 27-28 makes clear that the congregation in Philippi was facing opposition. As William Hendriksen notes, scholars have long debated the identity of these antagonists (Hendriksen 1963: 87). Some commentators suggest it was pagan outsiders who were violently persecuting the church[291], or at least, had begun to discriminate against believers in society (Osiek 2000: 50). Other exegetes have argued that the opposers were internal false teachers such as the Judaisers that beleaguered the Galatian Church, or possibly pagan converts that were teaching libertine or ascetic corruptions of the faith.[292] In response, Paul calls upon the church, not to be intimidated but rather to continue to *"standing firm"* in their *"striving side by side for the gospel"*. The members are to be unified through their deep and binding love for one another, so that together they can be bold and fearless as they "present a united front to the world" and "stand shoulder to shoulder against" their enemies (Beare 1988: 70). This temerity, unity and love for each other, was to be the *"evidence"* of their enemies' coming *"destruction"*[293] and of the believers' own *"salvation"*. Scholars like O'Brien and Hendriksen consider the emphasis in the text to be on the benefit to the believers themselves – they were to be encouraged that their salvation was assured (O'Brien 1991: 152; Hendriksen 1963: 89). Others, such as Richard Melick and George Caird, stress the evangelistic meaning of the text – the characteristics of the church were to be a witness to the enemies of their need to turn from divine

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[291] See, for example, Beare (1988: 70) and O'Brien (1991: 153).

[292] For instance, Collange (1979: 75) and Martin (1987: 83-85).

[293] Related cognates in the Septuagint convey the sense of both the "exclusion from belonging to the Lord" as well as the "destruction and loss of life" (O'Brien 1991: 156).

judgement to the God who was the source of the Philippians' own love and courage (Melick 1991: 91; Caird 1976: 116; also Beare 1988: 68).[294] It was "the sign that the message they were proclaiming was true" (Wright 2002: 96), and was to inspire a "believing response" (Bruce 1995: 60). It seems likely that both are meant (see Michael 1928: 68) for Paul was driven by a concern for the congregations that he had established, as well as for the expansion and growth of the gospel among those who did not know Christ.

This missionary concern must be understood in the wider context of the love for the enemy that is advocated by Paul. The relation of the community to their enemies was not to be just one of witness to the reality of Christ, but also to take the form of a care and concern for such opposers. In Rom 12: 14, the injunction is given to: *"Bless those who persecute you; bless and do not curse them"*; this is reiterated in 1 Cor. 4: 12-13: *"When reviled, we bless; when persecuted, we endure; when slandered, we speak kindly".* As C. E. B Cranfield says, the believer is to seek the enemy's good and "to show that this desire is no mere pretence by actually praying for God's blessing upon them" (Cranfield 1985: 313). This love included non-retaliation, for the evil and harm done by the enemy in slander and persecution is to be met with endurance rather than reprisal, and with kindness rather than resentment. This principle of non-retaliation is clear in Paul's requirement that believers: *"Do not repay anyone evil for evil, but take thought for what is noble in the sight of all"* (Rom. 12: 17; see also 1 Thess. 5: 15). This love is also to take the form of a practical concern for such adversaries, *"if your enemies are hungry, feed them; if they are thirsty, give them something to drink"* (Rom. 12: 20). So, far from being encouraged to hate their enemies, believers are commanded in these texts to do good to them.

The similarity of these Pauline injunctions to Jesus' own teaching to love one's enemies indicate that the traditions of Jesus formed the basis of the

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[294] See discussion in Section 9.3 where the Philippian love and unity is commended for *"the faith of the gospel"*, a phrase to which some exegetes have also attributed an evangelistic meaning.

Pauline ethic (e.g. Hagner 1993: 134). In the Matthean gospel, Jesus' words are: "*You have heard that it was said 'You shall love your neighbour and hate your enemy'. But I say to you, love your enemies and pray for those who persecute you*" (Mt. 5: 43-44). The phrase "*love your enemies*" recurs verbatim in the Lukan text of 6: 35 (Hagner 1993: 133). The content of this love for the antagonist and persecutor is shown by the contexts of these teachings. In the Lukan text, the command is followed by the call to "*do good, and lend, expecting nothing in return*". Believers are called to act for the well-being of their enemies, in providing for their needs by making their material and financial resources available to them without expecting any returns (Nolland 1989: 299). This call, like that in the Pauline texts, is to a comprehensive care for the adversary, to behave in such a way as to benefit the welfare of the enemy in every sense. As Darrell Bock says of these gospel texts:

> Whether in attitude, action, word or intercession, the enemy is to be loved... This is 'tough love' because it is tough on the believer who loves. It is 'radical love' because it calls for denying oneself and being continually exposed to abuse. (Bock 1994: 123)

So, the priority of the other over the self, is not confined to family, community or the weak, as it applies also to the believer's own adversaries.

The enemy is, of course, the non-reciprocator par excellence, one who may be able to reciprocate, in that she/he has sufficient resources, but is unwilling to share and instead, often actively seeks to harm. So, the kindness and love shown to the enemy are often not exchanged with nothing at all, but with injury and hurt. The texts are clearly a call to a love that does not have in mind the "calculations and distinctions" in which there is a Tit for Tat, a "love-for-love, good-to-good, evil-to-evil reciprocity" (Bruner 1987: 223). There is no doing of "good deeds for others so they will return the favour" (Bock 1994: 125), rather the principle of "returns" in these passages is replaced by "a much more radical love" (Hagner 1993: 135). In fact, as John Nolland notes, the love of the enemy is directly set out in contrast to a reciprocal ethic in the form of the three questions given in the Lukan pericope (Nolland 1989: 301). The text reads:

> *If you love those who love you, what credit is that to you? If you do good to those who do good to you, what credit is that to you?... If you lend to those from whom you hope to receive, what credit is that to you?* (Lk. 6: 32-34)

The issue is given further commentary in both the Lukan and Matthean texts, the latter of which states:

> *But I say to you, do not resist an evildoer. But if anyone strikes you on the right cheek, turn the other also; and if anyone wants to sue you and take your coat, give your cloak as well; and if anyone forces you to go one mile, go also the second mile.* (Mt. 5: 39-41)

The text indicates that the love of the enemy, once again, pays no heed to reciprocated returns. In both gospels, it is the imitation of God that forms the basis of this love for the enemy, for both texts close this teaching with the appeal to be *"perfect"* (Mt. 5: 48) and *"merciful"* (Lk. 6: 35) as these are attributes of the Divine.[295] Given the very practical descriptions of how this non-reciprocal love is to be effected, and its dependence on emulating the very nature of God, there is again no indication that, as Ruse might suggest, it should be interpreted as mere euphemism, exaggeration not to be taken literally. As scholars like Leon Morris say of this altruistic love for the enemy, it is rather a "fundamental" teaching in the NT ideal of love (Morris 1992: 129), a real and non-negotiable calling in the texts.

This loving of one's enemies is so radical that Frederick Bruner speaks of it as "revolutionary", counter to the very "grain" of both human nature and culture (Bruner 1987: 223). Certainly, Donald Hagner considers that the teaching of loving one's enemies would have been shocking for its first

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[295] Lincoln Hurst suggests that the perfection in the Matthean gospel be understood in its OT context of indicating "total loyalty", a full commitment (Hurst 1992: 216). Its emphasis is different but still resonates with Lukan reference to mercy.

hearers as it had no exact equivalent within the Jewish tradition (Hagner 1993: 134).[296] This would have been so, not only for the Jews, but also for the Gentile hearers for whom "fierce loyalty to friends and fierce hatred of enemies is precisely" what was deemed "noble" in heroes, a virtue to be imitated (Bruner 1987: 218). It may well be that this NT teaching was as unique in its ancient context, as it is even today. If it is countercultural, what then of the view that it is also counter to human nature? It may be that this sense of the love of enemy as being counter-nature explains the views of exegetes like Christopher Evans and Donald Hagner. They have argued that the love for the enemy shows that the NT term for love (*"agape"*) should be understood not as a feeling but as a matter of volition, the will (Evans 1990: 334; Hagner 1993: 136). The call is to behave in such a way as to benefit the other, in whatever means are accessible, but one may continue to dislike such persons – it is a matter of choice and behaviour rather than emotive concern (Evans 1990: 334; Hagner 1993: 136). In this view, it is counter-nature in so far as it acts in opposition to innate, emotional propensities and relies instead on sheer willpower.[297]

Yet, Don Carson is surely right when he says of this rather sterile interpretation of *"agape"* as a "willed love", which incurs no necessary emotional content, that it is inconsistent with the NT teachings (Carson 2000: 30-34). This is evident by the fact that *"agape"* is also used for Jesus' love for the Father and the Father's love for the Son, the Divine's love for humankind and that between believers (see Carson 2000: 31-33; Morris 1992: 130). The use of *"agape"* in these contexts indicates that an active seeking of the

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[296] Whilst there are passages which required Israelites to treat their enemies with some consideration and to welcome the non-Israelite (Ex. 23: 4-5; 1 Sam. 24: 19; Pr. 25: 21; Lev. 19: 34; Deut. 10: 19), there are several texts which presumed a hostility toward those outside of the Israelite community, specifically those who were enemies of God (Ps. 139: 21-22; 26: 5; Deut. 7: 2; 30: 7). Thus, some scholars stress the continuity between Jesus' teachings on love for the enemy with the OT (Harrington 1991: 90-93; France 1985: 128), whilst others stress its radical disjunction (Hagner 1993: 134; Mounce 1991: 50). One would have to say that even if there were some OT precedent for a respect and consideration for outsiders, what Jesus and subsequently Paul and others (see 1 Pet. 3: 9) required, was beyond its strictures.

[297] This is not to say that the human ability to make choices is not itself based on natural processes, but rather that the two, emotions and will, are pitted against each other.

other's good that is detached, devoid of emotive concern, is clearly not the intended sense. In fact, the command to love the enemy is described in the Lukan text in a way that clearly indicates that a compassionate response is required toward such an adversary. As was noted above, in this gospel, Jesus' call to love the enemy, is presented as an imitation of the Father who is *"kind"* and *"merciful"* to those who oppose him (Lk. 6: 35, 36). This indicates that the love of the enemy is not just a matter of choice and behaviour, but that it also entails the psychological altruism of an internal attitude of genuine regard and concern.

Indeed, the very actions required in loving the enemy are such that they implicitly impel the believer toward a compassionate and empathetic response to this other, toward feelings of love. In both the gospels and the Pauline letters, the call is given to pray for those who persecute and request God's blessing upon them. In order to do this, the believer must take up the needs and welfare of the enemy and act as an advocate in presenting them before God. It is a process which requires a conscious acknowledgement of the needs of the enemy, the assuming of these within the inner world of the believer (as if they were one's own), and a sympathetic stance which desires for these needs to be met by God. So, as Bock rightly says, it is a call to be sensitive to the enemies' needs "caring enough to be concerned about how" they feel and "looking at things from [their] perspective" (Bock 1994: 125). It may well be that the initial and natural response to harm is an anger which seeks after retaliation, but for believers, the very act of prayer develops an empathetic regard. Indeed, Nolland is probably correct in seeing the linkage between the love for the enemy and Jesus' teaching on forgiveness that immediately follows in the Lukan text (Nolland 1989: 293-294). The requirement of believers to practice forgiveness is found elsewhere in the gospels and in the Pauline letters.[298] This is very probably a necessary step toward such love of the enemy as it lets go of the desire for reprisal, and its associated feeling of hatred, and so allows the emotional space for

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[298] See: Mt. 6: 14-15; Mk. 11: 25; Jn. 20: 23; Col. 3: 13; and 2 Cor. 2: 5f.

empathetic regard to form. While choice is evidently the first step, as believers must choose to pray and to forgive, it is not all that is involved for, by so doing, the natural capacity for empathy is engaged.

Another implicit meaning in the NT texts that reinforces this empathetic regard is the identification between the believers and their enemies. In the Pauline texts especially, there can be no doubt that all humankind, including those who now belong to the community of God, are sinners who were once enemies of the Deity. In Rom. 5: 8, 10 the text reads: *"But God proves his love for us in that while we were still sinners Christ died for us... while we were enemies, we were reconciled to God through the death of his Son*", and Col. 1: 21: *"And you who were once estranged and hostile in mind, doing evil deeds, he has now reconciled in his fleshly body through death"*. As Patricia Williams rightly pointed out, the context of the atoning work of Christ is the shared status of all people as enemies of the Divine (Section 7.3.2). There is, in these texts, the recognition of the continuity between the believer's identity with those outside of the community, for all have sinned (Rom 3: 23). One might say that it suggests a oneness of believers and non-believers, a unity with even those who were persecuting the church. This applies, of course, not just to an enemy who persecutes, who seeks to harm believers because of their faith, but also the one who hates, slanders, gossips and is jealous – for believers were also once like this and, indeed, such things continued to be features of the Christian community (e.g. Gal. 5: 19-26; 1 Cor. 3: 3). This unity reinforces the sense of humility toward the enemy and enhances the empathetic regard that depends upon a sense of identification with the other (see Section 4.5). Even the enemy is not an alien, one completely other to the self; instead, the enmity of the other is recognised *in* the self. This sense of solidarity is reinforced by another means, for the love of the enemy is the imitation of the Divine's own response to the believer. So, this love becomes even more accessible because it is the very experience of believers – they have been on the receiving end of such care. These bonds of identification together undoubtedly deepen the empathetic regard and enable the believer to act in a way that emulates the divine love.

Considering this context of the love for the enemy, its residing in the believer's own status of once being an enemy of God and having received divine grace and forgiveness, it is perhaps not surprising that, as was indicated at the start of this section, Paul includes a missionary aspect within such love. It may be recalled that the unity and love of the Philippian community was to act as a sign to their opponents of their need to turn to Christ. Interestingly, John Nolland considers that the purpose of the love of enemy in the gospel texts is also "evangelistic" as there is an "attempt to establish community with those who are alienated from the community of God's People" (Nolland 1989: 296). If the loving of one's enemies is aimed at opening up the possibility that the enemy will be drawn into a responsive love toward God, then it might raise questions in sociobiological terms. It could be seen as a means of gaining the fellowship of the enemy and bringing them within the circle of the community. This would be an advantage to the believer as the converted enemy would then become someone from whom the believer could receive benefit (at least, as long as the convert was not a needy individual). Yet, there is no intimation in any of the NT texts that the love of the enemy is conditional upon a positive response. It may hope and look for such a response but it is not dependent on it; the love cannot be withdrawn if it is unreciprocated. There is also no hint in the texts that the motivation for loving the enemy is for personal gain – instead, as described above, it is characterised by empathy, which is an other-centred, not self-focused, disposition (see Section 4.5). So, although this love of the enemy is open to establishing a relationship, it is not provisional upon it, and thus it contrasts both with the sociobiological principle of returns, and with the rather more austere altruism of those like Hagner, who tend to see this love as emotionally (and consequently, relationally) disengaged. In keeping with a genuine loving regard, NT love is neither indifferent to relationship with the enemy, nor is it a self-interested attempt to establish reciprocity with such adversarial individuals.

Yet, the NT response to the enemy does not mean that there will never be any conflict with such individuals. For a tension can be seen in the texts between the love for the enemy and that discussed in the previous section, the love of the weak. This is evident in the very strong terms by which Paul denounced the Judaisers, libertines and ascetics who were leading believers away from the faith. He refers to them as hypocrites, rebels and liars, and he wishes that the Judaisers would go the whole way and castrate themselves entirely (Gal. 2: 13; 5: 12; Titus 1: 10). So, the Pauline teaching of speaking kindly to the enemy, in these instances, gives way to very striking terms of repudiation. Indeed, of the libertine in the Corinthian church, Paul required that he be put out of the community (1 Cor. 5: 9-11). As Mohrlang observes: "Questions are sometimes raised about how consistent Paul is in living out his own ideals [of love], especially in the light of the harsh language he uses of those who oppose the gospel" (Mohrlang 1993: 578), at least of those opponents from *within* the church. Jesus also harshly rebuked those like the Pharisees who, through their teachings, were stopping people from entering the kingdom; *"For you lock people out of the kingdom of heaven"* and *"when others are going in you stop them"* (Mt. 23: 13f; also Lk. 11: 52). Jesus invokes a series of *"woes"* upon such persons, calling them *"hypocrites"*, *"blind guides"*, *"snakes"* and *"vipers"*. In the presence of the Pharisees, Jesus defends the right of those like the prostitutes and tax collectors to enter the kingdom of God even though this intensifies the Pharisees' own consequent rejection of him (Mt. 9: 1-12; 11: 19; Mk. 2: 16-17; Lk. 5: 29-31; 7: 36f).

Although these enemies were not always directly oppressing either Jesus or Paul, they were seemingly still seen as enemies because they were undermining the faith of others. In both cases, the responses were made on behalf of those who were spiritually vulnerable. The matter, however, is not constrained to the spiritually weak as there are rebukes given also to individuals who take advantage of, or disregard, those seen as socially, economically or physically weaker in society, including widows (Lk. 7: 12-13;

18: 1-8; 1 Tim. 5: 3f), slaves (Eph. 6: 9; Col. 4: 1; 1 Tim. 1: 10), children (Mk. 9: 36-37; Mt. 19: 13-14; Eph. 6: 4) and women (Jn. 4: 26-27; Col. 3: 19; also 1 Pet. 3: 7). In fact, it may be recalled from Section 9.2 that Paul denounces in equally strong terms believers who do not provide material support for widows who are in their natural family – he says they have "*denied the faith*" and are "*worse than an unbeliever*" (1 Tim. 5: 8). As George Ellis has observed, sacrificial love of the enemy must take into account the victims that are affected by the enemy's actions; a response that may call for defensive action (Ellis 2001: 122-123). Thus, as is seen in these texts, the care of the weak brings with it the possibility of conflict with those who are oppressing or indifferent to the plight of such persons. Does this mean then that these two forms of altruistic love in the NT, the care for the weak and that of the enemy, are at odds? Do the texts perhaps indicate that the care of the weak supersedes that of the enemy when the two are in conflict?

This surely depends upon the purpose of the criticisms and rebukes of Paul and Jesus, whether they were directed only to protecting the weak or also reflected a concern for the enemy. There is biblical support for the view that these rebukes were aimed at effecting the transformation of the enemies for their good. Whilst the concern for the weak is clearly portrayed, there are also indications in the NT writings that the concern for such enemies is that they be restored into a proper relationship with God and with the community. So, in Titus 1: 10-13, the *"rebellious"* and *"deceivers"* were rebuked *"so that they may become sound in faith"* (see also 1 Cor. 4: 14; 2 Cor. 7: 8-11; 13: 2-4). The libertine put out of the Corinthian church was treated in this way so he might give up his wrongful lifestyle that *"his spirit may be saved on the day of the Lord"* (1 Cor. 5: 5). So, Mohrlang is right when he concludes of such texts, "it is out of genuine concern for their welfare (i.e. out of love) that *such harsh words and confrontative actions arise" (Mohrlang 1993: 578).*[299] *In*

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[299] This is also seen in Paul's requirement for acts of kindness toward enemies so that they will thereby have "*burning coals*" heaped upon their heads (Rom. 12: 17-20). As James Dunn observes, this is understood by scholars as a metaphorical reference to bringing the enemy to recognise her/his actions with shame (Dunn 1988: 750). This passage is a quotation from Prov. 25: 22 (Cranfield 1985: 314) and may have represented an

the same way, Bruner suggests of the criticisms of the Pharisees and Scribes that "even here Jesus' warnings want to *save*" (Bruner 1990: 820), and Alfred Plummer that they were given as an "opportunity for conversion" (Plummer 1960: 325). Indeed, the rebukes of the Pharisees and Scribes in the Matthean gospel conclude with Jesus' lament over Jerusalem, *"the city that kills the prophets"*, and his longing as a mother hen to gather them under his wings, including those who *"were not willing"* (Mt. 23: 37). So, while the emphasis is seemingly upon the protection of the weak, it is best to see this defence as co-terminus with the care of both parties. It is simultaneously a protective action toward the weak and an attempt to restore the enemy.

In this section, a study of the NT texts in the context of reciprocal theory has demonstrated the many facets to the very radical command to love the enemy. It is a love that seeks to benefit this other in every sense including meeting their physical needs. It is an altruism that is not simply a matter of willed choice, but engages the self in an empathetic regard for the adversary – this occurs most powerfully in prayer for the enemy, a process in which their needs and situation are taken into the self and become like one's own. This identification with the enemy, and consequent empathy, is further deepened in the NT through the recognition that all humanity together are sinners and enemies of God. Indeed, the very experience of the believer as once an enemy of the Deity, and now forgiven and loved through divine grace, makes the love of the enemy even more accessible – for the nature of this love, the believer need only be aware of their own circumstance. The texts also indicate that this love of the enemy is open to relationship with the adversary, yet, it is not dependent upon any return – the command to love the enemy is unconditional. Here then, is a profound love for the one who is the epitome of non-reciprocators, the one who flouts any returns and seeks not to benefit, but rather to harm. Yet, as this section has shown, it is not that such enemies are never challenged, their oppression of the weak requires response, but that even in such instances, the motivation is not just a

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Egyptian rite where the guilty party had to carry a pot of burning coals as evidence of repentance (Dunn 1988: 751).

concern for the welfare of the weak but also for the enemies themselves who are being provoked to change for their spiritual good. So, it is a love that through empathetic regard is other-centred in its motive, and which expresses itself in pursuing the enemies' well-being whether this is practical or spiritual. This is, indeed, a radical altruism that transcends in motive and in action, the sociobiological expectations of reciprocity.

10.4 Altruistic Love and Heavenly Rewards

"Therefore God also highly exalted him

and gave him the name

that is above every name,

so that at the name of Jesus

every knee should bend,

in heaven and on earth and under the earth,

and every tongue should confess

that Jesus Christ is Lord

to the glory of God the Father" (Phil. 2: 9-11)

The culmination of Christ's total humiliation and self-giving love on the cross in the Philippian hymn (vv. 6-8; Section 8.4) is his exaltation as Lord of the universe (vv. 9-11). The Father demonstrates his approval of the Son by giving him "*the name that is above every name*" (Phil. 2: 9; O'Brien 1991: 233; Barclay 1979: 18; Moule 1889: 68); to Christ, all are to pay homage and reverence (e.g. Hawthorne 1983: 92; Lightfoot 1994: 128). Although no mention is given in Phil. 1: 27-2: 11 of any honour being bestowed upon the Philippian members themselves on account of their required emulation of Christ's conduct, the promise of such a reward is given later in the letter. In Phil. 3: 21, Paul says that: *"He [Christ] will transform the body of our humiliation so that it may be conformed to the body of his glory, by the power* *that also enables him to make all things subject to himself*". These verses of promise to the believer appear to parallel the humbling and exaltation of Christ in the hymn (e.g. Silva 1988: 214-215; O'Brien 1991: 261, 444).[300] The reward is the transformation not just of the body, but of the whole nature and personality of the believer – "man as a totality" (O'Brien 1991: 464).[301] Christ's exaltation in 2: 9-11 is the supreme forerunner for the promise of the believer's own participation in his glory.

This association of humble, self-giving love with later exaltation begs the question as to whether the self-denying conduct is truly an unconditional altruism or a long-term strategy of self-interest. If such attitudes, and the acts that they lead to, are ultimately rewarded with a benefit to the individual, then are they really other-centred? It could be said that NT altruism, although not concerned with the temporal sociobiological goods of material benefits and reproductive-replicative interests, still seemingly inheres an element of self-interest. In such an outlook, humble, sacrificial love is aimed ultimately at achieving a reward. Exegetical scholars are clearly aware of this potential interpretation in terms of self-interest. In fact, Karl Barth was so concerned that Christ's exaltation in Phil. 2: 9-11 should not be seen in this way that he suggested that the hymn be understood simply as indicating the nature of Christ (both as crucified and as Lord of all) and not in consequential terms (Barth 1962: 66-67). Thus, according to Barth, Christ's exaltation is not a reward for his sacrifice and humiliation. Barth is somewhat alone in this view as most scholars recognise that the exaltation is clearly the Father's response to Christ's humility and self-offering (see discussion in O'Brien 1991: 233-234). Certainly, Barth's perspective would not account for the direct linkage between the motifs of humility and exaltation in so many of the

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[300] The context of the passage is the example that believers are to imitate (3: 17f), one for which Paul himself is given as an illustration but which ultimately resides in the person of Christ in 2: 6-11 (O'Brien 1991: 444). Having accorded their lives with that of Christ, they are to look forward to and pursue their heavenly *"citizenship"* (v. 20) and their consequent glorious transformation (v. 21).

[301] As O'Brien notes this meaning is indicated in other texts such as Rom. 8: 29 and 1 Cor. 15: 49 (O'Brien 1991: 465).

NT texts.[302]

Paul is clear in his epistle to the Corinthians that there are rewards for those who are faithful in the service of the gospel (1 Cor. 3: 8; 10-14; Conzelmann 1975: 74-77; Collins 1999: 146, 152). This takes the form of divine approval for *"each one will receive commendation from God*" (1 Cor. 4: 5), an honouring which is metaphorically described elsewhere as the "*garland*" or "*crown*" that the faithful will receive from God into eternity. In 1 Cor. 9: 25, Paul says: "*Athletes exercise self-control in all things; they do it to receive a perishable garland, but we an imperishable one"* and another Pauline text reads:

> *From now on there is reserved for me the crown of righteousness, which the Lord, the righteous judge, will give to me on that day, and not only to me but also to all who have longed for his appearing.* (2 Tim 4: 8)

The gaining of such a *"crown"* at Christ's return is also seen in the other apostolic writings (Jas. 1: 12; 1 Pet. 5: 4; Rev. 2: 10; 3: 11; 4: 4, 10). In Jesus' teaching in the gospels, the notion of reward is a recurring theme. There are, for example, rewards for those who love Christ more than they love their own natural families (Mt. 19: 28-29; Lk. 18: 29-30; Section 10.4), and for those who show pity on the needs of the least of his disciples (Mt. 10: 41-42; Mk. 9: 41). Rewards are also promised to those who love the weak and the enemy, those non-reciprocators discussed in Sections 10.2 and 10.3 above. So, Lk. 6: 35 reads, *"love your enemies... Your reward will be great, and you will be children of the Most High"* (see also Mt. 5: 43-48). In Mt. 6: 2-4, to those who give to the poor, Jesus says *"your Father who sees in secret will reward you".* Thus, there is a promise of reward for the sacrificial love evinced by believers toward God (and Christ) and toward human others.

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[302] This is seen in passages such as: Mt. 23: 12; Lk. 1: 48-53; 18: 14; 1 Pet. 5: 5; and Jas. 4: 6. The motif of humility followed by exaltation is especially common in the OT (Gnilka 1971: 38; e.g. Ps. 18: 27).

There are two ways to approach the seeming problem of rewards for altruistic love, one is to consider the issue of motive and the other is to look at the nature of the rewards themselves – both of these will be briefly explored here. Indeed, the matter of motivation has already been touched upon in the sections above – Jesus' call was for his disciples to care for the poor and weak in ways that expressed a genuine concern for their well-being. So, they were not to be like actors feigning at such altruistic care (Mt. 6: 1-4; Section 10.2). The whole context of neighbour love was its meaning as a deep empathy that was attentive to the needs of others – including that of the enemy (Section 10.3). Genuine other-centred care is evidently the only accepted motive for love in the NT. The fact that the focus of such love was upon the welfare of the other, and not upon the reward per se, has already been noted in Section 10.2. As was pointed out in that section, this motivation is perhaps nowhere more evident than in Paul's teaching in 1 Corinthians 13 on the nature of love. He says: *"If I give away all my possessions, and if I hand over my body so that I may boast, but do not have love, I gain nothing"* (1 Cor. 13: 3). This love is not self-seeking, but "*patient*", *"kind"* and enduring (1 Cor. 13: 5) – it is a "pure and unselfish concern for the well-being of the other" (Thiselton 2006: 221, 222). As Hays notes, "Paul insists that there is nothing to be gained by self-sacrifice where love is absent" (Hays 1997: 226).

This issue of motive is addressed in Jesus' teaching in the Matthean gospel of the parable of the workers who, after labouring for varying lengths of time (some began their work at the start of the day, some at its end), receive as their recompense the same payment (Mt. 20: 1-16). The context of this teaching is Peter's question: *"Look, we have left everything and followed you. What then will we have?"* (Mt. 19: 27). Given the sacrifice that the disciples had made, Peter's expectation is seemingly of a correspondingly large recompense. As Hagner observes: "With such a great sacrifice and unqualified commitment... the disciples find themselves particularly interested in the compensatory rewards" (Hagner 1995: 563).[303] Jesus both assures them of their rewards (Mt. 19: 28-29) but through the parable which follows shows that such a recompense is not to form the goal of sacrificial discipleship – if it does then such believers will be disappointed. As W. D. Davies and Dale Allison observe, this parable is about "divine goodness and future rewards" and shows that "God's generosity transcends human expectations, and grace disallows calculation of recompense"; "it destroys all human reckoning" (Davies & Allison 1997: 70, 76; also Morris 1992: 504-505; Bruner 1990: 723). There can be no striving for bigger and better rewards than that of others, for there is rather an equality in the rewards which gives way to a hierarchy in one sense alone. This sense is indicated in the text by Jesus beginning and concluding this parable with the saying that the "*first will be last, and the last will be first*" (Mt. 19: 30; 20: 16). The only priority is that of the last over the first, the precedence of the one who makes her/himself a slave to others (see Mt. 20: 26-28; 23: 11; Section 8.4). Thus, seemingly the more other-centred the motivation and action of believers, then the greater their reward. This is somewhat of a paradox, one that can perhaps be expressed as: the person who most loves the other and has no mind for reward, is the one who receives the greater reward; while the person who seeks the reward by only appearing to love others, will receive less and may even be denied any recompense.[304]

What then of the content of the reward? In the gospels, but even more so in the Pauline corpus, it is God and Christ who are the reward of the believer. This is especially evident in Phil. 3: 8-11 where Paul sees all things as lost compared to knowing Christ. For Paul *"living is Christ and dying is gain",* for his *"desire is to depart and be with Christ, for that is far better"* (Phil. 1: 21, 23). Paul longs for the time when he will be fully enthralled with God *"when I*

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[303] While the primary meaning is the sacrifice of obedience to Christ, this, of course, entailed the sacrifice of loving others – the twin commands of loving God and neighbour are together what it meant to follow Christ (Mt. 22: 37-40).

[304] The gospels also contain, alongside the concept of reward, the idea of punishment for not loving others (e.g. Mt. 7: 19-23 and especially 25: 31f), a perspective also present in the Pauline letters.

will know fully, even as I have been fully known" (1 Cor. 13: 12; Hays 1997: 230-231). The reward of living for Christ is the intimacy of knowing God and living forever in the Divine's presence. This is so also in the gospels where the reward of eternal life is none other that knowing *"the only true God, and Jesus Christ"* (Jn. 17: 3; see also Mt. 5: 8). So, Richard Gutzwiller, says: "God himself is the reward of Christians" (Gutzwiller cited in Morris 1992: 139; see also Hurst 1992: 216). The reward is that of being able to love and worship God in full adoration, to be taken up in the homage and adulation of the Father and of the one "*whose name is above all names*". This is pictured most clearly in the book of Revelation where the believers *"cast their crowns before the throne"* of God (Rev. 4: 10), acknowledging him only as ultimately worthy of praise, and continuing in this worship day and night (e.g. Rev. 7: 9-15). Thus, the reward of love is the other-centred love and worship of the Deity.

Yet, the promised reward in the NT is not only the relationship with God, but it also includes relations with others. In the gospels, this is depicted as a divine feast at which believers will celebrate together, it is a human community perfected in its relations under God (e.g. Lk. 14: 6f; Mt. 8: 11; 22: 1f – e.g. France 1985: 156). As this and the previous sections have shown, the means of participating in the community of believers is through a deeply, other-centred care toward others. It would be strange indeed if the attitude of concern for the other, which is grounded in the very character of Christ and the Father, should be dispensed with at this time of reward. Certainly, nowhere does the NT suggest that other-centred love is rewarded with self-indulgence; it is, rather, as Paul anticipates in 1 Cor. 13: 8f, that love alone will remain. The promise is that the bond between believers and toward God will one day reach its fulfilment and perfection. As Anthony Thiselton says, "love will ever remain the interpersonal currency of heaven" (Thiselton 2006: 230). Its character and existence are permanent, "both now and forever" (Fee 1987: 628). Thus, the love which is not self-seeking will continue into eternity, and human nature will be transformed to perfectly fulfil love's ways. In the language of the previous chapters in this thesis, the self-centred egoism that plagues humans will give way fully to other-centred altruism. Thus, the reward of altruistic love is the opening up of the opportunity to continue such love more deeply, and into eternity. As C. S. Lewis says of the rewards for Christian love, they "are not simply tacked on to the activity for which they are given, but are the activity itself in consummation" (cited in Stott 1978: 132).

The aim of this section has been to look at the nature of the rewards promised to believers in the NT. It has contended that rewards are bestowed upon those who genuinely seek, not the reward itself, but the well-being of others. There is a reward but it is not accessible to those who out of self-centredness seek for this reward as an end in itself. Rather it is altruistic love, the concern for others as ends in themselves, that is honoured. Further, just as the reward is given to those who love, love is itself also the reward. By participating in the nature of Christ, the self-giving one, believers look forward to a time when they will fulfil fully and perfectly the twin commands of loving God and loving the neighbour. The promise of rewards opens up, not a time of rest from the busyness of other-centred love, but the opportunity to continue expressing such love more deeply, perfectly and into eternity.

10.5 Conclusion

The love that is to prefer others over self, has been shown, through the first two sections of this chapter, to apply specifically to non-reciprocators – the weak who do not have the resources to return any favours, and the enemy who has no will to do so. That the calling in both of these non-reciprocal contexts is to an altruistic love for the other, is evident in the texts themselves. The NT is clear that care for the weak is not to be used as a means of establishing a public reputation but is to be characterised by a genuine regard for this other and a simultaneous disregard for any public acknowledgement. The love for the enemy impresses a radical demand upon the believer who is to behave in a way that seeks the good of such adversaries. This altruistic care does not hold the enemy at arm's length in a detached, unemotional concern but is instead motivated by an empathy that is stimulated through prayer. In the requirement that believers pray for, and request God's blessing on, the enemies, their needs and well-being are recognised and empathetically taken into the inner world of the self. This identification with the enemy is itself deepened by the recognition that even the enemy is not an alien other, for the believers have also shared in this status, most profoundly in their own enmity toward God. While this love is open to a restored relationship with the enemy, it is nowhere in the NT texts conditional upon that outcome. Here then, is a deeply altruistic love that does not seek reciprocated returns but freely and fully gives of the self.

Yet, there are potential qualifications upon this love and these have also been addressed in this chapter. The first relates to the matter of whether the love for the weak and the love for the enemy are necessarily in conflict such that they act as constraints upon each other. Certainly, as the discussion has shown, the loving defence of the weak entails the challenging of enemies. This conflict, however, when viewed through the NT passages explored above, must be understood as an expressed care both for the weak and also for the enemies themselves, to whom the challenge is presented as a means of their restoration, a catalyst for change. The second possible qualification is the issue of rewards for such self-giving love; the promise of a heavenly recompense bestowed by the Divine. The question of whether this indicates that altruism in the NT is motivated ultimately by self-interest, is answered both by the contention that this love is focussed upon the well-being of others, and not on the reward; and that the reward itself is not self-indulgence, but rather the perfection of love in the lives of believers.

Chapter 11: Concluding Summary

11.1 Sociobiology, Nature and Human Nature

The central concept in Sociobiology is that biological nature, on account of the evolutionary process of genetic mutation and natural selection, is fundamentally 'selfish'. This metaphor is ascribed both to individual organisms, on the basis that natural selection results in phenotypic behaviours which cause the individual to produce more progeny than others in their population, and to the genes, on the grounds that the effect of selection is their 'selfish' replication and spread in gene pools, mostly through reproduction. Using the writings of the philosophers of science, Holmes Rolston III and Evelyn Fox Keller, Chapter 2 disputed the appropriateness of this selfish rhetoric on a number of grounds. The focus of this critique was upon the sexual reproductive process itself, that central element in the sociobiological 'selfish' rendering of nature, which was considered both from the perspective of the individuals and of the genes. It was contended that this process is evidently not 'selfish' from the viewpoint of the individual organism who must 'sacrifice' its well-being in the process of providing and caring for progeny. It is also arguably not 'selfish' with respect to the genes, which, due to outbreeding, are divided up and combined with entirely new sets of genes in every cycle of sexual reproduction. Moreover, with each new generation of progeny, genes are selected for their ability to 'cooperate' (act in a coordinated fashion with other genes) to produce reproductively successful individuals. Contrary to the sociobiological view that selection only serves the interests of individuals and their genes, the propagation of reproductively successful individuals (as well as unsuccessful types) was shown to be essential to the maintaining of species populations. So, rather than 'selfishness', interwoven in the processes of nature are elements of 'sacrifice' and 'cooperation' which effect wider benefits at the level of the species – concepts which were returned to in the discussions of 'altruism' in nature (Chapters 4-6). This chapter suggested that the metaphor of sacrifice or other-directedness is as appropriate, if not more so, as the sociobiological descriptor of selfishness. Such a rendering of nature, unlike the idea of pervasive 'selfishness', is not antithetical to the idea of divine providence within creation.

Whilst Chapter 2 assessed the sociobiological vision of the natural world, Chapter 3 presented a critique of the sociobiological view of human nature. The contention of sociobiologists is that human nature is under the control of natural selection, and as a result is subject to sociobiological descriptions. In support of this, some advocates propose a 'strong' co-evolutionary model in which human behaviour and culture are tightly linked to the genes and are consequently determined by natural selection. Other sociobiologists reject this strong dependency on the genes, yet maintain the primacy of natural selection on the basis that all other aspects of human culture and behaviour, those not circumscribed by the genes, are determined by memes (mental constructs, ideas). These memes are propagated from mind to mind through a natural selection process in which 'selfish' memes are the ones that survive. Chapter 3 discounted this memetic theory, which relies on an analogy between the genes and memes that simply does not stand up to scrutiny. Further, it argued that the co-evolutionary model explains only some aspects of human behaviour and culture. Thus, only a 'weak' version of the co-evolutionary approach is compelling for humans evidently have the capacity to transcend their genetic propensities. This introduced an important element for the chapters that followed, for while one might expect that Sociobiology would describe some aspects of human 'altruism', it would not be expected to provide a full explanation. This opened up the ideological space for an account of human benevolence in terms of cultural values and ideals that are not explicable by reference to biology alone.

11.2 Sociobiology and 'Altruism' in Nature

Chapters 4-6 critically examined the sociobiological construal of the 'altruisms' within nature, along with the 'selfish' explanations that are attributed to them. These chapters contended that sociobiological writings have correctly characterised the forms of 'altruism' in the natural world in terms of kin and reciprocal selection, but that the evidence for group 'altruism' is much more tenuous. Yet, despite their descriptors as types of 'altruism', as these chapters demonstrated, the sociobiological emphasis is upon the 'selfish' aspects and explanations for these behaviours. Therefore, kin 'altruism' is recognised as a phenotypic form of 'altruism', but as it benefits kin with whom the individual shares replica gene copies, it is characterised as fundamentally genetically 'selfish'. Indeed, even the idea of phenotypic 'altruism' is minimised by Hamilton's Rule in which the aiding of relatives is made proportional to the degree of genetic relatedness. Individuals will only help relatives in so far as it serves their genetic interests. In reciprocal 'altruism', whilst there is 'cooperation' between unrelated (non-kin) individuals, the focus is upon the benefits that accrue to each partner – phenotypic gains that the individual can then invest in reproduction. Reciprocation is 'cooperative' but as its ultimate outcome is in enhancing the individual's own reproduction, it is seen as both phenotypically and genetically 'selfish'. Further, sociobiologists consider that individual organisms will tend to access the phenotypic gains of reciprocation without making the reciprocal investment – they see this 'cheating' as an inevitable and widespread feature of the natural world. While group 'altruism' moves beyond the bounds of kin and reciprocators, and is phenotypically and genetically 'altruistic', it is restrained to benefiting the reproductive output of only group members, and the 'altruist' must usually share in the phenotypic and genetic benefits. The 'altruism' (if it ever occurs) is bounded to the group and is limited in the degree of its costliness.

As the 'selfish' renderings of these 'altruisms' were an extension of the 'selfish' theories discussed in Chapter 2, the insights presented in this earlier chapter were drawn upon in this critique. It was argued in Chapter 4 that because outbreeding is the norm in sexual reproduction, any benefiting of kin always involves supporting individuals who carry only *some* genes in common. The aiding of kin involves perpetuating both replica and non-replica genes. Thus, if it is characterised as genetically 'selfish', it must also be said to contain at least an equal degree of genetic 'altruism'. Questions were raised with regard to Hamilton's Rule, and even in instances where it was deemed a fitting explanator, it was shown to result in the sustaining of the species. In Chapter 5, the 'altruistic' elements in reciprocation were also noted for when reciprocation is viewed as a reproduction strategy, it clearly involves some genetic 'altruism' as offspring will carry both shared and unrelated genes. Where the reciprocation is to mutual advantage in a partnership, the effect is that the individual is supporting both its own reproduction and that of the unrelated partner – an even wider form of genetic 'altruism' is involved. In fact, as reciprocal relations occur not only within a species but also across species, this 'altruistic' supporting of unrelated genes may encompass the genes of other species. Moreover, contrary to the sociobiological view of widespread 'cheating', the outcome of mutual benefits is probably the mainstay within nature. Where such mutuality is maintained, the point was made that the reciprocal act is at least as phenotypically 'altruistic' as it is 'selfish' as both partners receive some net gain from the relationship. It was also observed that as the effect of reciprocation is the promoting of individual reproductive fitness, this 'altruism', like kin selection, contributes to supporting species populations. In instances of cross-species reciprocation, this sustaining goes beyond an individual's own species to include that of its partner species. In summation, these chapters characterised the biological 'altruisms' in a way that recognised both the elements of phenotypic and genetic 'altruism' that are involved, and the wider species benefits that accrue. It is a depiction for which 'other-directness' is again a seemingly apt descriptor. It is one that, once more, fits more easily with the Christian idea of a benevolent God who is involved in the processes of nature.

11.3 Sociobiology and 'Altruism' in Human Society

According to some sociobiologists, the widest scope for human benevolence is the forms of kin and reciprocal 'altruism'; humans will only aid genetic relatives and reciprocal partners. The sociobiological attempts to characterise these 'altruisms' in terms phenotypic and/or genetic 'selfishness' are not convincing, yet, in the human forms of these 'altruisms', sociobiologists impute the descriptor of 'selfishness' at the further level of the human psyche. Humans are selfishly motivated to pursue their own reproductive-replicative fitness through the apparent 'altruistic' care of certain individuals. In their view, humans are bound to a nepotistic favouring of kin, and a concern to ensure that any benefiting of non-kin is either directly reciprocated or sufficiently public for there to be reputation gains. Even within nepotism, the motivation to aid such others is conditional upon the degree of relatedness to the 'altruist'. In fact, as the 'altruist' is 100% related to her/himself, nepotism necessarily gives way to an ever deeper motivation to pursue one's own reproductive interests over any care of family members. Reciprocation also ineluctably moves toward an even deeper selfishness in the innate bias to cheat – to receive the gains of the reciprocal relationships without making any of the expected investments. Thus, human 'altruism' is characterised by a psychological selfishness that presents itself in the forms of nepotism, an insistence upon returned benefits, reputation seeking, cheating and an overriding self-interest.

Chapter 4 presented a critical analysis of the kin selected form of human 'altruism'. It was argued that there is, indeed, a genetic basis to the human care of offspring and perhaps sibling relationships, but that this is not so for wider kin relations. It was proposed, instead, that any secondary bonds of attachment toward more distal kin are simply formed around the primary relationships of parents, offspring and siblings. There is an innate basis to the care within the nuclear family, but not to a wider nepotism within society. In fact, even within the primary relationships, sociobiologists cannot account for what is commonly observed. Human parents, for example, are not normally orientated to offspring as a maximal number of viable young, the expected outcome from psychological selfishness, but rather extend an inordinate amount of care to offspring as individuals. In their care of progeny, humans exhibit a tendency toward psychological altruism, that is, they treat their progeny as if they were ends in themselves. This altruism is mediated by the human capacity for empathy and a cognitive realisation of others as subjective individuals with feelings, motives and goals of their own. Humans also show the ability to bypass reproduction and progeny care, in the pursuit of lifestyles that are entirely hedonistic in their motivation to maximise the individual's own pleasure and minimise pain – sometimes at the cost both to others and to the individual's own survival. Whereas Sociobiology would expect only psychological selfishness, the motivation and desire to promote one's own reproductive-replicative fitness, there is a propensity in humans for both psychological altruism and for egoism. The matter of which of these is expressed by individual humans depends, in part, upon the ideological values that constitute the person's worldview.

In the assessment of reciprocity, Chapter 5 contended that this sociobiological category of 'altruism' is representative of some aspects of human relationships with others, but not all. It would seem that humans naturally expect reciprocated returns in the exchanges of goods, such as in economic trade. In this context, reputation building for being a good reciprocator (for fair exchange) is often deemed an acceptable practice. Humans, however, do not commonly use this reciprocal standard in personal relationships, instead, the expectation of such relationships is that they will be characterised by a psychological altruism. Consequently, any attempts to promote one's reputation (and therefore, self-benefit) through the aiding of others is usually deemed immoral. So, for instance, the helping of needy persons as a means to ultimately gain advantages for oneself is disparaged.

In fact, an investigation of game studies has shown that even within economic exchanges, humans exhibit a propensity for genuine altruism which at substantial cost to themselves maintain fairness and extend generosity beyond reciprocal interests. Although it was acknowledged that humans do cheat and deceive in their relationships, it was argued that this is not an inevitability as sociobiologists suggest. In fact, in order to do this, people often have to proactively de-empathise with those malaffected and rationalise their own behaviour such that they can view these individuals as commodities rather than sensing and feeling persons. Moreover, the point was made that the sociobiological argument for an innate bias toward cheating is inevitably self-defeating to their own enterprise, for it suggests that sociobiologists themselves may well have cheated and set out to deceive others in their writings.

Some sociobiologists have added the category of the group to the selected forms of human 'altruism'. This view was considered in Chapter 6 where it was contended that whilst humans clearly form groups, this is arguably not because of group selection. In order for this selection to occur, it not only requires that a strict and complex set of conditions be met, but it presumes upon memetics; the reasons for discounting the validity of this meme theory were given in Chapter 3. Yet, not only is this group 'altruism' untenable, it also adds very little to the idea of human beneficence, for any displacement of individual psychological selfishness in intra-group caring relations, is seen by its advocates as replaced by inter-group or institutional selfishness. The expectation is that this, at the very least, will involve an apathy toward non-group members and will often erupt into rivalries and hostilities between groups. The point was made in this chapter that in fact, humans do show the capacity for such group competitiveness, but also for a transcendence of group theory in behaviours that actively set out to benefit non-group members. So, even if group selected 'altruism' were feasible, like the kin and reciprocal forms, it does not provide a full explanation of human beneficence. In summary, human benevolence can take the form of a genuine other-centred altruism and can encompass both those within and outside of the sociobiological categories. Humans also commonly exhibit the capacity for self-centred egoism and of course, for motivations which lie somewhere on the spectrum between these two. Thus, rather than being characterised by the alleged selfish concern for one's own (or one's groups') reproductive-replicative interests, the human psyche is much more complex than the sociobiological view allows.

11.4 Sociobiology and New Testament Love

In Chapter 7, a critical analysis was given of the discourse between sociobiologists and theologians on the nature of human care for others in the NT. As this chapter indicated, the sociobiological view is that the NT texts on love, like all other cultural values, have been shaped and defined by natural selection. Thus, the benevolence that the NT espouses is concerned only with the aiding of those sociobiological categories of kin, reciprocal partners and group members. The response to Sociobiology from the theologians, Stephen Pope and Patricia Williams, have made important contributions to the discourse. Pope rightly paid heed to the psychological altruism that is involved in the human care of kin, reciprocators and group members. Yet, in keeping with sociobiological theory, he considered that human benevolence is disposed to care only for such others, and that the NT largely endorses these biases, which represent an ordering of love. Yet, such an acceptance of the sociobiological view of human care is unwarranted, for as this thesis has argued, human behaviour is not tied to genetic constraints and the biological limits of care. While Williams also considers that humans are largely innately bound in their expression of love, she sees this very differently – not as the ordering of love but as a description of human original sin. In this, Williams is far too negative as she overlooks both the psychological altruism that can exist in these relationships and the NT texts that evidently support the care of those like kin. In fact, much of Williams' negative portrayal of relationships such as familial care comes from the sociobiological rendering of them in terms of selfishness – a view that the prior chapters of this thesis have strongly disputed. Nonetheless, Williams' work offers a helpful contrast to Pope for she rightly attends to the NT call to care for those *outside* of the sociobiological circle (the love of non-kin, non-reciprocators and non-group members). In keeping with their distinctive approaches, Pope regards self-love as a key and primary feature of NT teachings, while Williams seems to see it as antithetical to the NT emphasis on sacrificial self-giving. While these writers make important contributions to the discourse, they are both too accepting of the sociobiological interpretation of human nature, and their analysis of the NT is clearly incomplete given their very different views.

Indeed, the purpose of Chapters 8-10 was to present a deeper exploration of the NT teachings on love in the context of Sociobiology. These chapters took a particular text, Phil. 1: 27 - 2: 11 as its core passage, but investigated a wide range of NT texts. Chapter 8 considered the internal nature of NT altruism by looking specifically at the injunctions for human relationships in Phil. 2: 3-8. In a close scrutiny of the text, two important elements in NT love were revealed, the first of which is humility, the profound self-effacement which negates any preoccupation with the self. The second is an other-centred orientation that calls for a deep attentiveness to the needs and welfare of others. In humility, the focus is moved away from the self, and in other-centred love, it is directed toward the empathetic and subjective awareness of the other. As the Philippian text made clear, Christ is the exemplar of this radical other-centred love – the one who gave his life in humble service of others, even to the point of death. The NT love portrayed in the text clearly goes beyond the sociobiological selfish motivation, and is set out in the passage by its contrast to the self-centred egoism of ambition and conceit. It is a deep psychological altruism in which individuals are treated very much as ends in themselves. Moreover, its implied use of human capacities like empathy and the subjective awareness of the other, show that this love is not formed in opposition to human nature, but employs evolved abilities. The imitation of Christ in this love resonates also with the human biological propensity to form behaviours and attitudes based on significant others, especially senior family members. Thus, it is through biologically based capacities and cues that believers are directed toward a fully self-giving expression of love; created human nature facilitates the love required of believers in the NT.

Chapters 9 and 10 presented an in-depth study of to whom this radical love is directed in the NT, specifically its relation to the sociobiological categories of kin, group members and reciprocal partners. In Chapter 9, it was contended that the NT teachings show that believers have a duty to love their natural family, but that this commitment is expanded beyond this sociobiological circle to include the church. The latter is a community that uses the language of the immediate family, with its strong biological basis, to unite a group that is without any genetic boundaries. Thus, the innate bonds of the natural family are recognised and upheld by the biblical teachings (as is human reproduction). Given the potential inhering of psychological altruism in these relationships in humans, and their import for sustaining species, this can be seen as reflecting the divine will for human flourishing. Yet, there is also the transcendence of these natural kinship ties in the love that is required for the family of God. While sociobiologists have argued that the NT requirement for loving other believers is a form of in-group morality, with its counterpart of hostility toward outsiders, this chapter presented the view that this is, by no means, the meaning in the NT. The church is not to be characterised only by an internal group affiliation, as believers are compelled to express a love for those outside the community. The NT calling is to a universal love that encompasses all others.

In Chapter 10, the altruistic regard in the NT was considered in the light of Sociobiology's reciprocal theory. The idea suggested in Chapter 5 that humans tend to see reciprocity as appropriate in economic contexts but not in personal ones, is borne out by the NT teachings which, with their concern for the latter form of relationships, require a psychologically altruistic regard for others that transcends issues of reciprocal returns. Indeed, rather than seeking reciprocity, believers are required to place a special priority on the love of the weak, those who do not have the resources to return any favours, and to extend love to the enemy, who has no desire to make any returns. Moreover, while the NT indicates that there are instances when it is appropriate to challenge one's enemies, as in the defence of the weak, it was argued that even this conflict is an expression of care for such enemies for whom the challenge is presented as a means of their restoration. The final section of this chapter contended that this NT love is not compromised by the promise of divine rewards to believers, for such recompense is none other than the consummation and perfection of other-centred love in the lives of those who would be transformed into the likeness of Christ.

The fact that humans, even believers who are instructed in the NT, do not live up to these NT standards for love is surely due to the human capacity for egoism. Whilst this egoism is derived from the innate hedonistic drive in humans, it must be recalled that hedonism is not in itself sinful, as it is a necessary component for human survival. Humans evidently have evolved natures that may facilitate either altruism or egoism; they are moral beings who can choose either good or evil. The role of Scripture is evidently in generating values and concepts that direct humans toward altruism and away from such egoism. Yet, it is not the only worldview as humans have set up many alternative ideologies by which to live, not least among which is Sociobiology with its ideological construct of 'selfishness' and the inevitable leaning away from altruism.

As these summaries have demonstrated, this thesis has engaged at a depth and breadth with Sociobiology – it has included critical analyses that have ranged from scientific concepts to exegetical detail. The thesis has encompassed in the span of its assessments: the sociobiological characterisation of nature and human nature; its rendering of 'altruism' in the natural world and in human society; and its description of NT love. In this comprehensive and novel approach, it has presented a full and robust response to the sociobiological paradigm and its assumption of 'selfishness'. Nonetheless, it is by no means a complete account and the thesis itself raises questions that require further investigation. Given the emphasis upon biblical texts, how does the human innate potential for egoism fit with the traditional interpretation of human original innocence in passages like Romans 5: 12 (and Genesis 1-3)? What are the implications of Sociobiology for the human relationship to the natural world, and how might a response be formulated that integrates both biological insights and biblical textual analysis? Although this research has emphasised the elements in the natural world that coincide with a belief in divine providence, what then of the aspects of theodicy, the natural evils of pain and death, that are intrinsic to the evolutionary process? How do these relate to the metaphor of other-directedness? These are important issues which, within this dialogue with Sociobiology, remain to be addressed and present areas for further research.

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Appendix 1: Sociobiology, Ideology and Religion

The re-characterisation of nature in Chapter 2, to reveal its 'sacrificial' and generative processes, shows that the sociobiological description of nature as 'short-sighted selfishness' is not derived from mere observation but seemingly has been brought into the science from an external source. This is important to note because sociobiologists like E. O. Wilson and Richard Dawkins are confident that theirs is an objective analysis and description of nature. While sociobiologists acknowledge, at some level, their use of metaphorical language drawn from human affairs, they do not recognise any ideological root that has influenced their particular choice of metaphor. Others have not been so slow – many commentators have argued that both the rhetoric of selfishness in Sociobiology, and the implicit individualism in its framework, have their origins in particular contexts and movements within human history. The discussion below will offer a very brief outline of this historical contextualisation of Sociobiology.

It is Charles Darwin, of course, who is credited most with placing the natural selection mechanism at the centre of the evolutionary process – the paradigm that is adopted by sociobiologists. Considering the centrality of Darwin's work in Sociobiology, commentators have paid heed to the historical context that is believed to have influenced Darwin's own description of evolution. Most commonly cited is the impact of Thomas Malthus upon Darwin's depiction of nature as the 'competitive' struggle for existence. This English cleric had advocated, in an essay published in 1798, that human populations tended to increase beyond their food resources and that, along with disease, famine and war, the competition between individuals and classes, were positive checks to delimit the population by eliminating the weakest (cited in Ryan 2002: 29; Russell 1985: 145-146). The idea of competition is, of course, linked with the concept of self-interest. With regard to the latter, the influence of Adam Smith, and his antecedent in Thomas Hobbes, is also mentioned as through their writings the capitalist market economy, with its principles of individual autonomy and human selfish pursuit of personal gain, became seen as the mainstays of a healthy civilisation (Baker 2002: 190; Grant 2001: 37; Sahlins 1978: 92f; Midgley 1985: 142-146). This conceptual framework, along with the war that characterised the nineteenth century politics of the British empire, is thought to have formed the hostile elements of struggle and selfish individualism which became the cornerstones of Darwin's theory. Karl Marx is said to have commented on Darwin that: "It is remarkable how Darwin recognizes among beasts and plants his English society, with its divisions of labor, competition, opening of new markets, 'inventions', and the Malthusian struggle for existence" (Marx cited in Baker 2002: 192)

The modern consumerist society of the West is said to have become even more structured along the lines of self-interest and individual choice. Rational self-interest is the defining term not only in economics but also in sociology and psychology (Grant 2001: 34-42). If individualism and selfishness were central to Darwin's own work, it is perhaps not surprising then that they have become even more radicalised in Sociobiology where even the inanimate genes are granted the ontological status of 'selfish' entities. The neo-darwinian vision is one that resonates with the present cultural myths of power and wealth (Margulis 1997a: 277). As Sahlins says: "What is inscribed in the theory of Sociobiology is the entrenched ideology of Western society: the assurance of its naturalness, and the claim of its inevitability" (Sahlins cited in Grant 2001: 19). It should be noted that sociobiologists might respond by saying that the matter is vice versa; it is the nature of biology, human and non-human, that has generated the values of Western society. It has already been shown in Chapter 2, however, that theirs is not an adequate description of nature.

In Richard Lewontin's criticism of neo-darwinist approaches like Sociobiology, he sees the commitment to individualism as the foundational tenet, more so than that of selfishness. He speaks of "the obvious ideological commitment to modern entrepreneurial competitive hierarchical society. Yet, beneath is a deeper ideology, and that is the priority of the individual over the collective" (Lewontin 1991: 93). He refers to "the ideology of modern science, including modern biology" as that approach which:

> makes the atom or individual the causal source of all the properties of larger collections. It prescribes a way of studying the world, which is to cut it up into individual bits that cause it and to study the properties of these isolated bits. (Lewontin 1991: 12-13)

This is more profound, because it precedes any observation of nature, that is, before a behaviour can be observed, the entity, be it gene or individual, must be separated from its wider (ecological) context. This may explain the reason that Dawkins is unable to see the wider benefits of genes (to individuals and species) and why George Williams could not consider that individual reproductive fitness inevitably makes contributions to species and ecosystems. It is only a reductionist perspective, that deals with isolated entities, which can speak of 'waste' in nature, something which is surely alien to an ecological view (see Section 2.3.1).

Some, like Mary Midgley, consider that this radical individualism reflects an ideological inheritance from Greek thought (Midgley 1985: 142). If this is so, the work by Richard Nisbett and his colleagues, may offer some insights. These sociologists considered the differences between Greek and Eastern methodologies, like that of China. They argued that whereas the Greeks had an analytic approach to the world in which the object of interest was detached from its context so that its behaviour and properties could be studied, the Eastern methodology was holistic in its attentiveness to the relations of parts within wholes (Nisbett, Peng, Choi & Norenzayan 2001: 293). It is for this reason that the Greeks located "power in the individual", whereas the Chinese had a sense of the collective properties and meanings (Nisbett *et al* 2001: 292). They suggest that this accounts for the individualism, in which causality is understood in terms of the object only rather than its relations to others, that pervades Western thinking (Nisbett *et al* 2001: 296-299). It is a view that tallies with Lewontin's criticism that evolutionary disciplines like Sociobiology have espoused ideological commitments to the individual over the communal whole, and that this has informed their methodological approach.

There is another ideological aspect that some believe lies just under the surface of Sociobiology – this is its religious context. In *Who Wrote the Book of Life?* Lily E. Kay looks at the metaphors in genetic science, one of the areas fundamental to the sociobiological synthesis, many of which are drawn from the reading-writing theme. Thus, genes are 'expressed', DNA is a 'code' that is 'copied', 'edited' and 'transcribed', and RNA (ribonucleic acid) is 'translated'. She postulates that this theme is derived from the Judaeo-Christian metaphor of nature as the "book of life" – an immanent text that has content as it contains analogies, signifiers and ciphers relating to the glory of God (Kay 2000: 30-33). She sees the transcendent nature of the Word (John 1: 1) in Christian theology as further endorsing the primacy and power of language in Western culture. When these religious meanings were divorced from their roots in science, she argues that the idea of a "transcendent code" was still retained (Kay 2000: 14). This was reinforced by the association that has been drawn between computational analysis and genetic material in the twentieth century with the result that genes are not just 'text' but 'information' – giving it a further sense of intelligence and meaning (Kay 2000: 24; also discussed by Fox Keller 2000: 162-173).

In Kay's view, the power of these language metaphors has been allied with the sense of unity and simplicity, which came from the idea of specificity among biomolecules in the 1940s onwards (Kay 2000: 41-55; 1993: 4-5).

This was compounded with the idea of universality, as the genetic code was shown in the latter part of the twentieth century as the hereditary component of all biological life (Kay 2000: 30). Sociobiology, with modern genetics at its basis, has seemingly inherited the ideas of a sacred and informative 'text' that confers unity, universality and transcendence. Issues, such as complexity in developmental biology and chaos in ecology, have tended to be eclipsed in sociobiological thinking in favour of this idea of a grand design of life dictated by the genes. It is not surprising then that the genes are apparently seen, albeit supposedly metaphorically, as "ontological entities" that have an internal self-sufficiency and the capacity to "make" (Lewontin 2000: 11; also Fox Keller 1995: 8, 11), a capacity that seemingly gives them a power over all biotic life including humankind. It may well be that, albeit subconsciously, this idea of an all-powerful and ever-presiding 'text' in nature, and its direct association with the genes, has led to the all-pervasive gene's-eye view of nature with its quasi-religious aspect.

Certainly, Midgley sees the identification of genes with authoritative power as an implicit religious bent (Midgley 1985: 61-62).[305] Unlike Kay who sees the religious underpinnings as coming from a past historical source, Midgley bases it in the present and future. She suggests that in the vacuum felt by the loss of religious faith in modern society, evolutionary sciences, like Sociobiology, have attempted to fill the void with meaning (Midgley 1985: 131-136).[306] In this search for an ideology, sociobiologists have posited a vision of life as very much competitive, in which the deity worshipped is a

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[305] Others have gone so far as to suggest a religious identification in the apparent reverence for Darwin's writings as "canonical", and with Darwin himself being invoked as an "intellectual predecessor" akin to a "saint" and "master" (Miller & Halloran 1993: 106-108).

[306] Sociobiologists are, certainly, self-conscious about their aim to garner meaning for human existence. Consider writers like E. O. Wilson and Michael Ruse who argue that the collapse of moral philosophy, because of its apparent inability to reach consensus with regard to ethics, has created a void that they consider Sociobiology is eminently able to fill (Wilson 2000: 562; Ruse 1993b: 133f; Maienschein & Ruse 1999: 1-2). Wilson and George Williams have denounced religion as traditional beliefs that must be substituted by their evolutionary science (Williams 2001: 211f; Wilson 2000: 560-561; 1980: 430-431). They see Sociobiology as the new and only arbitrator of truth and meaning.

non-benevolent power and the worldview is one of selfishness and hostility (Midgley 1985: 131, 136). This is, surely, a profoundly religious attitude to the world, which even if implicit and submerged under a conscious repudiation of belief in God, refuses to see the world in the impersonal terms consistent with scientific atheism and stretches out to incorporate what is observed in nature into categories of meaning and personhood. As sociobiologists have shown no awareness of the historical and ideological influences upon their writings, they have also not heeded any possibility of a religious aspect. It must be noted that the choice of the metaphor of sacrifice in Chapter 2, may itself reflect the ideology of the writer of this thesis, for whom the biblical tradition of the Christ who sacrificed his life for others is an important element. Although the suggested term of 'other-directedness' is perhaps preferable as it is not so laden with ideological emphasis,[307] 'sacrifice' (and 'altruism') are used in this thesis with regard to nature as they provide compensatory terms by which the sociobiological emphasis on 'selfishness' can be qualified.

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[307] In fact, if a purely holistic reading were given of nature, which stressed only 'other-directedness', then a balancing case for 'self-directedness', which recognised the importance of the individual, would have to be made.

Appendix 2: Infanticide, a Human Necessity?

Sociobiologists note the instances of infanticide in several animal species – a phenomenon that is thought to occur when new dominant males, in species like langurs, mice and lions, enter a group (Barash 1982: 324; Forbes 2005: 176; Mock & Parker 1997: 312). The males seemingly dispose of the young of the previous male and so induce the female to begin again to breed. Infanticide occurs in Belding ground squirrels, which are seemingly killed for food by a hungry male, or by females who do not consume the young, but kill them apparently to reduce 'competition' (Sherman 1981: 317-327). Although Holmes Rolston has suggested that some of these cases of infanticide are due to human-induced stress in the environment such as over-crowding (Rolston 1999: 101), this at least seems not to be the case with birds. The white stork will often kill some of its young during the nestlings' first two weeks (Mock & Parker 1997: 274), and the harpy eagle and hooded grebe will abandon its second egg once the first has successfully hatched (Forbes 2005: 11); as Section 4.6 has shown such behaviours are linked to natural ecological pressures such as food limitations. Both the cardinal fish and burying beetle will consume its excess eggs (Forbes 2005: 172-173). There is some evident 'economy' where infanticide is due to surplus eggs or strictures on resources, and other causations may well come to light in time.

It is, perhaps, no surprise that sociobiologists are keen to apply the rationale of infanticide to the human situation, arguing as Forbes does, that this kind of conflict (child abuse, neglect and infanticide) in human families is "not an aberration" (Forbes 2005: 199); it is not a matter of pathology but of natural fitness maximisation. Thus, he says: "Infanticide arises in humans for the same reason that it arises in organisms as diverse as apple trees, ants, and aardvarks" (Forbes 2005: 178). It is, like the lions and langurs, directed toward unrelated young, and to brood reduction during periods of stress and scarcity (see also Barash 1982: 336). This fitness maximisation is said to be the reason that less care is given to disabled and adopted children, stepchildren and to those of single parents (Alexander 1979: 215; Barash 1982: 326-327, 336). Indeed, the work by Margo Daly and Martin Wilson has confirmed that step-parents do exhibit less attachment, and are more likely to abuse and kill their stepchildren (Daly & Wilson 1981: 406-409). In addition, parents with a disabled newborn often experience initial feelings of rejection which Daly and Wilson see as an innate response toward a potentially "inviable or infertile young", and suggest that if the context were not that of a public hospital, the young would have been abandoned (Daly & Wilson 1981: 410-412). In the same way, infanticide is more common among single parents, especially fathers, for whom it is argued that resource scarcity is the inducement (Forbes 2005: 198, 200; Emlen 1995: 8094). Forbes concludes: "Like it or not, infanticide is part of the human behavioural repertoire" but he admits that it is maladaptive as, in the case of the stepfather who kills his stepchildren, the mother is not enticed to subsequently mate with him as lionesses do (Forbes 2005: 182).

In response, although it is very likely that many parents experience an initial rejection of a disabled child, difficulty in bonding to stepchildren, or increased household stress in resource privation, the processes involved, are more complex than these sociobiologists allow. The single parent will most probably experience a generalised frustration and distress, which may or may not become fixated on the child. The initial rejection of a disabled child is very possibly an expression of grief, a reaction of disbelief, which is also a common occurrence in situations of illness or death, and which may itself stem from concern for the child. The parents may also fear social stigma, depending on attitudes in the prevailing culture, or an overwhelming sense of guilt or blame as if they had deliberately caused the disability. Interestingly, Daly and Wilson suggest that the disability itself may impair the mother-infant bond and this may be, in part, the cause of the rejection (Daly & Wilson 1981:

410-411).[308] Certainly, they acknowledge that human "parents often develop extremely strong parental affection for handicapped children, and where they do not, it is commonly the case that the infant was prolongedly separated from the mother at or soon after birth" (Daly & Wilson 1981: 412). Further, these authors have also pointed out that men present during the birth of a child experience strong feelings of affection (Daly & Wilson 1981: 413). As this is less likely to happen for a stepfather who may not have been present at the birth, this may, at least in part, explain their lessened attachment to stepchildren. In fact, it seems that people who begin to take care of a child during its early years form a deep bond even when the child is not their biological own (Barber 2004: 40-41).

Although sociobiologists see the attentive care of disabled and unrelated young as evolutionary 'mistakes', as 'misfirings' of the parental instincts (e.g. Dawkins 2006: 221), in fact, the human species is perhaps best equipped to care for such young. It has already been mentioned in Section 4.5 that humans have a highly developed empathetic capacity, which enables them to express an intensive care of young; the kind of care that is required for those with disabilities. They also have the cognitive ability to recognise that each child, even despite impairment, is a subjective being – capable of some level of sensate, emotional, cognitive and even spiritual life. While the care of young in species like birds is restricted to progeny (by aural cues and nest position), the human empathetic response and subjective awareness does not inhere such biological restraints – humans can care for non-genetically related young. Whether this care for disabled and non-related young is deemed as a 'mistake' or proper behaviour, is surely a teleological question about the intended purpose of humans; one that must be resolved by reference to ideological values.

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[308] From birth onwards, bonding occurs through cues such as the constant face gazing between mother and newborn. Any early separation or disabilities like blindness will inhibit this (Daly & Wilson 1981: 413).

In fact, the cases of parents (and other adults) who do abuse and kill the children in their care demonstrate these very aspects of relationship. These adults often need to rationalise their behaviour continuously in a way that decreases empathy. So, they will repeatedly say or think “the child deserved it”, “she/he is not normal” or “it didn't really hurt” and so on – there is a co-mixture of choice, the development of habitual patterns of thought and the consequent repressing of empathy. Cultural beliefs also surely play an important role in emphasising or de-emphasising the other-centred senses. So, for instance, an ideology that characterises young infants or disabled children as non-human will presumably, where it is explicitly or implicitly assumed, have the effect of reducing empathy, as well as the sense of the child as a subjective other. The category of being non-human separates the child out from humankind, and thus from the treatment that is normally accorded to the subjective, feeling lives of humans. Interestingly, the capacities for empathy, rationalisation and cultural belief are seemingly not considered in sociobiological discussions even in such important areas as human infanticide.

Appendix 3: The Relationship Between Human Sexual Mates

The potential for other-centred empathy and self-centred hedonism, along with the suggested role of ideology, can be seen in the human relationship between sexual mates. As was mentioned in Section 4.5, it is very probable that the high demand of care for offspring has facilitated the natural instincts involved in the strong bond that forms between sexual mates. One such feature in humans is their capacity, unlike most animals, to engage in sexual activity by mutual stimulation and not by being on heat (Wilson 2000: 547-548). This sexual gratification is undoubtedly a cementing force in the relationship, but it is not the only one. As Daniel Fessler and Kevin Haley note, many human couplings begin with a romantic or limerance phase where the pair are very nearly obsessed with one another (Fessler & Haley 2003: 10-11); a state recognisable by certain brain patterns. This is an important initial bonding phase that protects against early mate defection – an essential for mate cooperation in humans where it takes the young a long time to reach maturity.

The engrossing attention to the other in the limerance stage is, in time, replaced by another cohesive force that of "companionate love" (Fessler & Haley 2003: 11). Here, there is the "experience [of] a sympathetic orientation toward the partner wherein the prospect of harm befalling the partner is cause for distress; the desire to avoid inflicting harm then motivates abstention from defection" (Fessler & Haley 2003: 10-11). The long-term commitment that results is further solidified by social arrangements, made especially during the romantic phase, such as the severing of former family and relational ties. Both the intensity and self-conscious awareness within the human limerance and companionate phases have seemingly no equivalents in nature. So, the view expressed by some sociobiologists that because of natural selection, human mates, like all other species, necessarily manipulate each other in order to coerce the other to contribute as much as possible to progeny whilst minimising their own investment, is simplistic as it ignores the very different processes that are involved in this human bond.

Whilst there are natural, biologically based ties that bind human mates to one another, an observation of human behaviour shows that choices can be and are made. Some individuals seemingly opt for perpetuating the sexual enjoyment and/or the romantic phase with a series of partners rather than move into companionate regard with a single mate. The hedonistic seeking of continual new romantic/sexual pleasures may take the form of egoism where the individual's own pleasurable states become their primary focus. There is also the human possibility for a deepening of the other-centred companionate or empathetic process such that the other person's well-being becomes of ultimate concern. Humans are faced with small but frequent choices that must be made between the various possibilities. It should be noted again that hedonism is not wrong in itself, it is part of the sexual enjoyment that can cement a single, faithful commitment to one partner but it may also be the driver for the opposite.

With the human capacity for choice, comes the necessity for an ideology, for it is through one's conception of the meaning of life and the relative values of behaviours that humans attempt to resolve their different drives and make decisions. It is cultural values which, quite apart from selection pressures, may deepen or lessen the stabilising empathetic bond between partners, and which may serve to delimit or emphasise the pursuit of the sexual and/or romantic pleasures. One example of the latter may be the Hollywood movie characterisation of the mate relationship, which often seems to emphasise the romantic element. It seems at least possible that this raises (probably unconsciously) the expectation in viewers that the romantic experience should be perpetuated (often involving a series of partners) and that the companionate phase is to be disregarded. So, in mate bonding, and indeed, in all relationships, humans bring their capacities for empathy, hedonism, choice and a cultural and ideological frame of reference, into their relationships. Within these lies the human potential to go beyond simply the reproductive-replicative drive, and to express a psychological altruism or egoism, and motivations in the continuum between them.