

The Maternal Bond in Ethics and Evolution

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Abstract: The scope of the humanities has been broadened by tracing the evolutionary roots of human biology. A salient example of the move in this direction is the philosophical study of ethics. Specifically, Nel Noddings' theory of Care Ethics has made contributions to an evolutionary understanding of morality as having developed through several paths, one of them stemming from the maternal instinct. Recent scientific research on the brains of pregnant women supports Noddings' philosophical sketch. Thus, Noddings' work contributes to the Explaining Morality Program (EMP). The scientific models of morality in the EMP can become stronger if they can incorporate Noddings' insights about a maternal evolutionary path to morality.

Keywords: autonomy, care ethics, evolution, explaining morality program, Nel Noddings.

"That which mingles these pure principles with the empirical does not deserve the name of philosophy... much less does it deserve that of moral philosophy." (Kant's *Groundwork*, trans. Thomas Kingsmill Abbott, 1895)

I. Introduction

According to the results of a five-year study reported in the journal *Nature Neuroscience* (Belluck 2016), pregnancy changes a woman's brain. Specifically, the study found that, during pregnancy, changes occur in the size and structure of the areas of the brain that are responsible for perceiving the feelings and perspectives of others.

The study further found that the *more* the subjects' brains changed, the higher the subjects scored when their emotional attachment to their babies was measured. The researchers suggested that perhaps these changes in the brains of pregnant women cause their brains to specialize – to become more perceptive to the needs of their children, thereby enhancing their maternal responses and mothering skills.

Have millions of years of natural selection acted on the female mammalian brain and shaped the nurturing tendencies of women? Everyone knows what a mother bear will do if she sees you approaching her cub. It's her instinct. Think about maternal instincts – such as recognizing threats, recognizing needs, and experiencing an emotional bond – all from an evolutionary perspective. Wouldn't these evolved nurturing tendencies have profound implications for mammalian societies – and human ethics, too?

II. The Explaining Morality Program (EMP) and Models of Morality

The investigation of how to view ethics from an evolutionary perspective is a large area of vibrant research that has produced an extremely rich array of work. A wide variety of ethical theorists couple their ethical theories with an evolutionary perspective.¹

This research is not only being pursued by what might be called ethical theorists, but by many kinds of researchers (Katz 2000). The philosopher and cognitive scientist Walter Veit (2019, 83) describes this work as an “interdisciplinary research program with the explicit aim to explain and understand human morality.” Veit dubs it the explaining morality program (EMP). Involved in the program are “economists, biologists, neuroscientists, psychologists, and even philosophers.” (Veit 2019, 83) Veit explains that, although the EMP has ancient roots, for the last forty years or so, much of it has focused on explaining morality in evolutionary terms.

Veit views the EMP as originally emerging in the ancient world, in Plato’s dialogue *Protagoras*, for example. The EMP continues through Hume (1983; 1989), Darwin (1871), and Dawkins (1989). And, for Veit, the modelers of morality are currently the most promising researchers in the EMP, though they have been underappreciated, he thinks (Veit 2019, 86). The modelers Veit specifically has in mind are Skyrms (1996; 2000; 2004) and Alexander (2008). Veit writes that “[m]odelers such as Skyrms simply continue an old philosophical school of thought with the modern tools of science, a move that ought to be encouraged.”² (2019, 87)

While Veit regards the EMP as an interdisciplinary research program, the only humanities discipline he mentions is philosophy, though he does give it special mention. He writes that “philosophers have offered distinct and extremely valuable insights by drawing conceptual distinctions.” (2019, 85) Veit views many philosophers as valuable contributors to the EMP. The philosopher Alexander (2008), Veit claims, is the best example of a modeler (Veit 2019, 85). Veit regards Alexander’s *The Structural Evolution of Morality* (2008) as “perhaps the most extensive modeling treatment on the evolution of morality.” (2019, 85) While discussing the prisoner’s dilemma, Alexander cites the philosopher Thomas Hobbes twenty times. And Alexander’s supervisor, Brian Skyrms, another philosopher, has been an influential contributor of modeling to the EMP.

III. Noddings’ Contribution to Ethics in Evolutionary Perspective

The philosopher, moral theorist, and proponent of Care Ethics, Nel Noddings, in her book, *The Maternal Factor: Two Paths to Morality* (2010), observes much work being done with evolution and ethics, but she sees very little that incorporates a

¹ Mizzoni (2017a) surveys normative ethical theories and metaethical theories that attempt to accommodate an evolutionary framework.

² For a discussion of how Skyrms’ work is explanatory, but not prescriptive, see Mizzoni (2010).

maternal factor, that is, female experience, the maternal bond and maternal instincts. Noddings argues that theories of evolution and ethics should take into consideration our inherited tendencies, including the maternal instinct.

The subtitle of Noddings' 2010 book is *Two Paths to Morality*. What are those two paths, exactly? The one path is the one described in her Care theory, which explains the path of morality that begins with the maternal instinct, the maternal bond, or, simply, care. The other path is the more traditional path that has occupied ethical theory for centuries, a path more clearly seen from a male perspective, she claims. Those ethical approaches view ethics as derived from reciprocity and self-interest (Noddings 2010, Locations 548, 2087).

In her work, Noddings has contributed to the development of the theory of Care Ethics (1984, 2010). As an ethical theory, Care Ethics is a 'newcomer' and 'still developing.' (Noddings 2010, Location 1574) Care Ethics is a practical ethical approach that, according to its proponents, is distinct from more traditional ethical approaches such as Utilitarian Ethics, Kantian Deontological Ethics, and Virtue Ethics.³

And while some ethical theorists have sought to describe *the* source of morality (Kant, for example), Noddings has more modest aspirations about her ethical theory of Care Ethics. She claims to be "exploring one significant source of morality – maternal instinct and the natural caring that develops from it" and does "not claim that it is the only source of morality." (Noddings 2010, 32) On this point, Noddings' view is in line with the recent thesis of Sterelny and Fraser (2017, 983), that "human moral practices are a complex mosaic. Elements of that mosaic have different origins, respond to different selective forces; depend on different cognitive capacities; probably have different metanormative evaluations."

Noddings distinguishes between *natural caring*, which she views as a development from a maternal instinct, and *ethical caring*. She does not argue that "an ethic of care evolves in a blindly biological way." (Noddings 2010, 1) With the concept *ethical caring*, Noddings acknowledges that those who are ethically caring are persons who think and make choices. Our intellectual abilities have also evolved, she contends, and we can use them to reflect on ourselves (Noddings 2010, 1).

Noddings, in addition to defending Care Ethics as a practical normative ethic, offers a theory about the evolution of morality and a particular source of morality, and thus also engages with metaethics. Metaethical theories describe ethics in a general sense, regarding the ultimate nature and origin of ethics. The question about the emergence and spread of morality is a metaethical question. Theories that describe practical ethics to use in deciding our conduct are known as normative ethical theories. Noddings deliberately contributes to normative ethics, in that her Care Ethics has a practical ethical dimension concerned with the

³ For a description of Care Ethics as a recently developed theory that differs from other traditional ethical approaches, see Mizzoni (2017b).

justification of particular moral claims and living a moral life. In the history of philosophical ethics, ranging from Aristotle, Hobbes, Kant, and Mill, for example, philosophers have commonly sought to integrate metaethical and normative aspects of ethics (Darwall 1998, 12). Though Noddings' account is metaethical in that it engages with the EMP by describing the emergence and spread of morality, her theory is not technically a model of morality in Veit's sense, since she does not employ tools of modern science to flesh out her account.

Both kinds of ethical theory – practical and metaethical – can integrate and accommodate the insights of evolutionary theories. This is most fruitfully done when we carefully spell out the ethical components, and then view those components from an evolutionary perspective. In doing so, we can understand those ethical elements more deeply. Although some feminists are skeptical of what evolutionary theories say about human nature, others, like Noddings and Vandermassen (2005), maintain that a feminist account couples well with an evolutionary view. Let us look more closely at the components of Noddings's Care Ethics.

Care Ethics views *personal relationships* and *care* as the central components of living an ethical life. For Noddings, "*caring... involves attention, empathetic response, and a commitment to respond to legitimate needs.*" (2010, 28)

Noddings (2010) argues that evolution plays an important part in understanding Care Ethics and the evolution of morality more broadly. The fundamental elements of Care Ethics sit well with scientific models of evolution. Noddings suggests that to start thinking about this topic we need only imagine the earliest human mothers, because, for their infants to survive, early females needed to have particular characteristics and abilities – most important would be the ability to detect, "to read," when the vulnerable and defenseless infants needed something (Noddings 2010, 11).

Darwin himself had written about the evolution of the social instincts and their importance for human ethics, and even referenced maternal instincts (Darwin 1871, 72, 87). And some contemporary theorists such as Frans de Waal (1996, 24-25) view the social instincts as having their roots in the maternal instinct.

Even Richard Dawkins, a more recent evolutionist, author of *The Selfish Gene* (1989), claims that genes prompt a caring instinct as a way to preserve human bodies that, in turn, will help to preserve and reproduce genes. As Dawkins puts it: "it is of advantage to a parent to know when a baby is happy, and it is a good thing for a baby to be able to tell its parents when it is happy. Signals like purring and smiling may have been selected because they enable parents to learn which of their actions are most beneficial to their children. The sight of her child smiling, or the sound of her kitten purring, is rewarding to a mother." (Dawkins 1989, 138-9)

Even though Noddings acknowledges that care is deeply rooted in instinct, nevertheless, Care theory does much more than describe human behavior or the

roots of human behavior. She explicitly characterizes Care theory as a theory with normative dimensions. Noddings says she

seeks to construct and defend a workable normative ethic... a prescriptive ethic should take adequate account of the way things are, including our inherited tendencies to care most about those closely related to us. (2010, 27)

It does happen that natural and instinctual caring that is practiced out of love and inclination can fail, she claims (2010, 34, 37). She offers two kinds of situations to explain how natural caring can fail. First, it can happen in its usual settings, in close personal relationships; and, also, it can happen in settings that are so large that natural caring cannot function. In those larger settings, a shift from care to justice is appropriate, she holds.

Thus, ethical caring becomes morally necessary in cases where natural caring fails; ethical caring will need to establish or restore natural caring. To achieve this, ethical caring relies on the power of reason and critical thinking to exert control over one's life (Noddings 2010, 118-119).

IV. Noddings on Autonomy

The ability to exert some level of control over one's life is vital to Care theory, Noddings claims (2010, 111). One aspect of how some dimension of autonomy is important for care theory is in response to an objection made against Care theory, namely that Care theory can potentially endorse self-sacrifice and subordination of women. Therefore, in response to such worries, Care theorists must carve out some space for personal autonomy (Noddings 2010, 111).

Noddings maintains that a modest level of freedom is all that can reasonably be defended, since genetic and social factors shape the self. Yet, some degree of autonomy is possible. She understands autonomy as the ability to exert limited control over our lives, and critical thinking is the key, she holds, for extending the span of control we have over our lives (2010, 119).

The role that autonomy plays in Noddings' Care Ethics contrasts with the role autonomy plays in the Kantian ethics defended by the contemporary philosopher Christine Korsgaard, for example. According to Korsgaard, humans have "the capacity for normative self-government, or, as Kant called it, 'autonomy.'" (2006, 112) Writes Korsgaard: "Rationality... is normative self-government, the capacity to be governed by thoughts about what you ought to do or to believe." (2018, 40)

The issue of contrast is that Noddings acknowledges the presence of autonomy in humans, but she does not hold that ethics emerges (solely) from autonomy. As we have seen, the path of morality Noddings seeks to explicate is the one where morality has emerged from the maternal instinct and natural caring. Kant and Korsgaard, by contrast, hold that morality emerges from autonomy. About normative self-government, Korsgaard holds that it "is at this level that morality emerges." (2006, 112; 2010)

Korsgaard describes the ultimate source of this autonomy as follows:

There is nothing unnatural, non-natural, or mystical about the capacity for normative self-government. What it requires is a certain form of self-consciousness, namely, consciousness of the grounds on which you propose to act *as grounds*. (2006, 113)

Korsgaard sees that autonomy and reason are somehow a function of our organic structure, and that particular organic structure is a product of an evolutionary process. Yet when reason and autonomy become possible in an organism, it “gives us a whole different way of being in the world.” (Korsgaard 2006, 117)

Under the perspective of the timeline of human evolutionary history, once human beings had evolved brains that could yield the intellectual capacity of reflective self-consciousness, then humans would have become capable of normative self-governance. In this view, normative ethics, then, could be said to have become possible. The evolutionary process would have then provided the necessary conditions for morality, yet not the sufficient conditions.⁴

Let us examine whether Noddings’ account of autonomy has a better fit with evolutionary accounts of human nature than Korsgaard’s approach does. Noddings regards her account of autonomy as a revised version of autonomy, which is unlike a Kantian view of autonomy. The Kantian version upholds an autonomous will subject only to reason. And Kant’s view is that ethics, in turn, is rooted in autonomy. Noddings’ account of autonomy, however, is that autonomy is limited, it is subject to other factors besides reason. For Noddings, the Kantian account is actually incompatible with Care theory. “Care theory,” she writes, “anchors itself in natural caring and uses the power of reason to maintain it.” (Noddings 2010, 109)

Darwin and Dawkins are evolutionary theorists who have views on autonomy that are comparable to Noddings’ view on autonomy. For Darwin, a moral being possesses ‘self-command,’ and the ‘power of reasoning.’ (Darwin 1871, 86) Darwin acknowledges the importance of rationality for a full-bodied ethics, yet he emphasizes that other important elements of human nature must be in place first. Noddings takes a similar stance. Darwin thinks that humans have the impulse to aid others, for example, but the improved ability to reason would guide them (Darwin 1871, 86). Darwin, in contrast with Kant, holds that reason alone will not generate ethical standards such as the golden rule (Mizzoni 2009). In ethics, thinks Darwin, human nature endowed with social instincts is more fundamental. For Darwin, the social instincts plus intellectual powers plus acquired habits lead to the foundation of morality – the golden rule (Darwin 1871, 106). Darwin holds, then, that when we take an evolutionary perspective on human nature, we can still recognize our own autonomy as persons who deliberate.

⁴ This is how the moral philosopher Alan Gewirth puts it (1993, 242, 255).

Richard Dawkins also acknowledges a degree of autonomy in his view of humans as products of evolution, for he says “[t]he brain is big enough to override the genes.” (2001, 11) This is tantamount to the degree of autonomy Noddings argues for. Psychological attributes are put in place by evolution, says Dawkins. “Kin selection and selection in favour of reciprocal altruism may have acted on human genes to produce many of our basic psychological attributes and tendencies.” (Dawkins 1989, 191) Even though Dawkins is a genic selectionist, meaning that he holds that natural selection works on genes, not individuals or groups, he still acknowledges that humans are individual subjects. “Bodies may be colonies of genes,” observes Dawkins, “but they have an individuality of their own. An animal moves as a coordinated whole; subjectively I feel like a unit, not a colony.” (1989, 46)

The way Korsgaard views these accounts of Noddings, Darwin and Dawkins is that they are heavily reliant on the presence of social instincts. For Korsgaard, that does not undermine the presence of autonomy, but those accounts fall short of providing a satisfactory explanation of normativity. As we have seen, Korsgaard’s Kantian position is that morality derives from autonomy, so, from her perspective, accounts such as Darwin’s, Dawkins’ and Noddings’, which do not connect normativity to autonomy, will fail to provide an account of normativity at all.

For Korsgaard, social instincts accounts emphasize the content of morality. Such accounts view social instincts as linked to morality, but for Korsgaard that linkage does not show that morality comes from those instincts. For Korsgaard, the question remains of whether those instincts are right or wrong.

She writes:

But a normatively self-governed being is one who is motivated to avoid wrongful conduct because it is wrong; the motivation must be produced by the wrongness itself, not merely attached to it, even if it is non-accidentally attached to it. The reasons why actions are right or wrong must be the reasons why we do or avoid them. So it looks as if nothing short of what Kant called ‘pure practical reason’ can possibly do the job. (2010, 19)

But isn’t this simply a different path to morality that Korsgaard is striving toward? Why must moral right and wrong be defined in that way?

In sum, Noddings’ view is that evolution plays an important part in understanding Care Ethics and the evolution of morality. *Care* and the emotional bonds of *personal relationship* directly trace back to our evolved nature; and rationality and a degree of autonomy also trace back to our evolved nature. Noddings has argued that a focus on the maternal factor can enhance metaethical and normative ethical theory. Yet, unfortunately, the maternal bond has not had a salient place in the models of morality developed by most researchers in the EMP.

V. The Maternal Bond and Models of Morality

To Noddings' mind, the fact that the maternal bond and female experience have been neglected by developers of models of morality in the EMP is, in some ways, not surprising. On the one hand, moral theories have traditionally, for thousands of years, been formulated based on male experience.

Yet, on the other hand, how could such a fundamental, essential, and absolutely necessary condition for human survival – the maternal bond – not be incorporated in a theory or model that purports to illustrate the evolution of morality?

Since the maternal bond has not had a prominent place in the EMP, it seems that the modelers have focused on what Noddings terms the masculine path to morality. In her work, Noddings has highlighted how a focus on the maternal bond can enhance ethical theory and ethical models. Taking the maternal factor seriously can improve models so they become more attuned to one of the paths that morality has taken in evolutionary history. Noddings, in her philosophical work, has outlined this path. A route from the maternal bond to later developments of morality, in ethical care for example, can be made more explicit by modelers of morality who use the tools of science. Such a model of morality would make the path from the maternal instinct to the evolution of ethics more visible. The maternal model would differ from previous models that picture morality as having developed through the male path of cooperation or rational choice theory.

A first step in the direction of creating a maternal model is noting the important connection between Noddings' insights and the scientific study of the brains of pregnant women. As briefly described at the beginning of this paper, a recent study has brought to light the changes that take place in the brains of first-time mothers (Belluck 2016). With scanning techniques, the researchers could see the differences that took place in the first-time mothers' brains. In the study, men's brains were also scanned. The brains of first-time fathers showed no difference from before their children were born and after the babies were born.

Whether the women received fertility treatment or conceived naturally, the changes in the pregnant women's brains were the same. And brain changes were seen regardless of the sex of the babies. In addition, the researchers used techniques to link those observed changes with maternal responses. It appears to be a case of mothers' brains becoming more specialized in terms of enhanced vigilance and nurturance, for the role of being mothers. Changes to the first-time mothers' brains were visible two years after having given birth. Such findings add credence to the maternal path to morality.

VI. Conclusion

Noddings, in her work with philosophical ethics, has made contributions to our understanding of morality. She has explained how Care Ethics is distinctive from

other, more traditional ethical approaches such as Utilitarian Ethics, Deontological Ethics, and Virtue Ethics. She has done this by highlighting the importance of care and relationships in our understanding of the nature of ethics.

In addition, Noddings has sketched an evolutionary account of morality as having been developed through several paths, one of them stemming from the maternal instinct. Veit has praised the strengths of scientific models of morality. With Noddings' work, those models can become stronger, if they can incorporate a maternal path that leads to morality. Veit has noted how philosophical work can contribute to the EMP. Noddings' philosophical work can contribute to the EMP as well, specifically her metaethical work on the origins of ethics. Since models of morality are only explanatory, we must remember that the normative aspect of her ethical theory stands outside the EMP, because explanations of morality are one thing, while practical normative applications are another.

Noddings, like many other ethical theorists engaged with evolutionary theory, is helping to broaden the scope of the humanities. She is open to unearthing the roots of morality in our evolved biology. The philosophical study of evolution has successfully pushed various humanities subjects, including philosophy, theology, and art, toward a closer relationship to the sciences – see Dutton (2010) and Haught (2010). This interdisciplinary program has helped expose important aspects of our evolved biology – self-consciousness, autonomy, commitment to values, and various factors that contribute to ethical reasoning, as well as forces churning beneath the surface of human societies and cultures.

The humanities have always reflected on who and what we are, examined human motivations, and critically evaluated the ethical concepts we use. In so doing, the humanities have added depth to how we understand ourselves. The (biological) sciences can also contribute to our self-understanding along this path of discovery, and in their own ways also add depth. Traditionally, the humanities have pushed our thinking far back in history. An evolutionary framework does much the same, obviously. As the philosopher of religion, Loyal Rue (2000), puts it, evolution can provide an overarching epic story of human history.

Yet those like Kant who speak of pure principles of moral philosophy hold that to mix pure principles with the empirical, as Noddings does, is either misguided or unfruitful. We have seen how, for Korsgaard, a neoKantian, morality has its source in autonomy, which only requires the capacity for reflective self-consciousness. From that, Korsgaard argues that normative self-government, or reflective endorsement, becomes possible, and this is the path to genuine morality.

As Korsgaard sees it,

according to Kant... [t]he test of reflective endorsement is the test used by actual moral agents to establish the normativity of all their particular motives and inclinations... the reflective endorsement test is not merely a way of justifying morality. It is morality itself. (1996, 89)

Noddings, however, paints a different picture, an alternative path to morality. She asks us to imagine the earliest (successful) human mothers, and what would have

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been required for them to preserve their defenseless infants. Noddings explains that:

The earliest human mothers had to 'read' their infants and respond to their expressed needs... But then she had to assess the need... the mother must respond to meet the need. In this 'I must,' we see a pre-moral imperative. The mother is not obeying some moral principle; she is responding quite naturally to the child's need, for the child's sake. (2010; Location 184-191)

According to Noddings, one path to morality has relied on varied elements of our evolved biology, including a maternal instinct, as well as cognitive equipment for at least a limited capacity for autonomy. Even more scientific research about the brains of pregnant women is likely to come in, which can help to build a new scientific model of morality, one that will illuminate the path that has led from an ancient maternal instinct to morality as we know it today.⁵

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⁵ A much earlier version of this paper was presented at the University of Pennsylvania, in Philadelphia, PA, July 5, 2018.

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