

**Centripetal and Centrifugal Forces in the Moral Circle:
Competing Constraints on Moral Learning**

Jesse Graham¹ Adam Waytz² Peter Meindl³ Ravi Iyer¹ Liane Young⁴

1. University of Southern California

2. Northwestern University

3. University of Pennsylvania

4. Boston College

in press, *Cognition*

Corresponding Author:
Jesse Graham
Department of Psychology
University of Southern California
3620 S. McClintock Ave.
Los Angeles, CA 90089
jesse.graham@usc.edu

Abstract

The idea of the moral circle pictures the self in the center, surrounded by concentric circles encompassing increasingly distant possible targets of moral concern, including family, local community, nation, all humans, all mammals, all living things including plants, and all things including inanimate objects. The authors develop the idea of two opposing forces in people's moral circles, with centripetal forces pulling inward, urging greater concern for close others than for distant others, and centrifugal forces pushing outward, resisting "drawing the line" anywhere as a form of prejudice and urging egalitarian concern for all regardless of social distance. Review of the developmental literature shows very early emergence of both moral forces, suggesting at least partly intuitive bases for each. Moral education approaches favoring one force over the other are compared, to show how these forces can provide constraints on moral learning. Finally, the centripetal/centrifugal forces view is applied to current moral debates about empathy and about politics. The authors argue that this view helps us see how intercultural and interpersonal disagreements about morality are based in intrapersonal conflicts shared by all people.

Keywords: moral learning, moral development, moral education, empathy, ideology

**Centripetal and centrifugal forces in the moral circle:
Competing constraints on moral learning**

1. Introduction

How far should we extend our circle of moral regard? Should we be morally concerned for all humans, include other mammals as well, or extend it even further? Or should we prioritize the needs of our family and our immediate community? And within our moral circles, should we care equally for all without prejudice, or afford moral concern for some more than others (e.g., family vs. strangers, humans vs. nonhumans)? While most people may share both intuitions – that we should care for close others more than strangers, but also that we should extend our moral concern as far out as we can – how they adjudicate between them can vary dramatically, across both individuals and situations.

Popularized by Peter Singer's (1981) *The Expanding Circle*, the idea of the moral circle has been used recently to investigate interindividual and intercultural differences in moral judgments. For instance, recent research (Waytz, Iyer, Young, & Graham, in press; Waytz, Iyer, Young, Haidt, & Graham, 2016) has demonstrated consistent differences in the size of people's moral circles between people who identify as political liberals and those who identify as political conservatives, and work using the Moral Expansiveness Scale (Crimston, Bain, Hornsey, & Bastian, in press) has been used to capture such individual differences more generally. While the moral circle concept is useful for understanding moral disagreements between people, in this paper we propose that conflicting intuitions about the proper size and structure of the moral circle represent conflicts *within* individuals as well. To this end, we develop the notion of centripetal and centrifugal forces in the moral circle, intrapersonal opposing forces that both

constrain moral learning. We review developmental evidence for these forces in very early childhood, as well as moral education approaches favoring one force over another. We then turn to implications of this intrapersonal view for understanding current debates about empathy, politics, and moral conflicts more generally.

1.1. The Moral Circle

The earliest articulations of the moral circle concept all indicate a developmental trajectory of expansion, whether that development is thought to occur over evolutionary, historical, or ontogenetic timescales. Moral circles can be thought of as a series of increasingly large concentric circles, with the self in the center, surrounded by immediate family, extended family, friends, local community, nation, world area, all humans, all mammals, all animals, all living things on Earth, all living things in the universe, and finally all things including inanimate matter (Waytz et al., 2016; see also Crimston et al., in press, for a related ordering including more social categories). The initial idea of the moral circle is commonly attributed to the Irish historian W. E. H. Lecky, author of *History of European Morals from Augustus to Charlemagne* (1869):

Men come into the world with their benevolent affections very inferior in power to their selfish ones, and the function of morals is to invert this order. The extinction of all selfish feeling is impossible for an individual, and if it were general, it would result in the dissolution of society. The question of morals must always be a question of proportion or of degree. At one time the benevolent affections embrace merely the family, soon the circle expanding includes first a class, then a nation, then a coalition of nations, then all humanity, and finally, its influence is felt in the dealings of man with the animal world. In each of these stages a standard is formed, different from that of the preceding stage, but in each case the same tendency is recognised as virtue. (Lecky, 1869, pp. 100-101)

This expansion of the moral circle, from family to nation to humanity to other animals, is conceived by Lecky as a series of developmental stages, presaging the developmental theories of Piaget (1932) and Kohlberg (1969) but driven by affection rather than reasoning. Lecky was in

fact echoing political philosopher Edmund Burke (1790), who saw parochial fellow-feelings as a necessary first step for expanding such feelings outward: “To be attached to the subdivision, to love the little platoon we belong to in society, is the first principle (the germ as it were) of public affections. It is the first link in the series by which we proceed towards a love to our country, and to mankind” (Burke, 1790, pp. 68-69). The developmental expansion of the moral circle was cast in evolutionary terms by Peter Singer (1981), with altruistic tendencies originally functioning exclusively for kin and tribe in premodern humans, then deliberately and rationally expanded outward via utilitarian moral principles to encompass strangers (Singer, 2015) and other animals (Singer, 1975).

1.2. Centrifugal vs. Centripetal forces in the moral circle

Burke, Lecky, and Singer all describe a *centrifugal* (centrum + fugio = “center-fleeing”) force playing out over time, pushing from the center of the moral circle (family, community) out to the outermost circles (all humanity, other animals). Such a force can be motivated by a number of intuitive and rational factors, including compassion and empathy for increasingly distant social targets, aversion to the prejudice inherent in drawing the line between any two categories (e.g., moral concern for countrymen but not foreigners), concerns of fairness and equality, and utilitarian principles of maximizing welfare regardless of social proximity (see Figure 1).

We suggest that this centrifugal force is in conflict with another powerful force in the moral circle – a *centripetal* (centrum + petere = “center-seeking”) force pulling inward toward the smaller and more immediate circles of kin and tribe. Even those who advocate for egalitarian forms of effective altruism (e.g., Bloom, 2014) have expressed the conflicting intuition that people normatively should devote more moral concern to close family members than to non-kin,

or that people should care more for proximate others than for strangers in other parts of the world (Wraight, 2011). The centrifugal force can also be motivated by both rational and intuitive factors, including familial attachment, ingroup loyalty, threat and scarcity, principles of duty and obligation to close others, and contamination concerns about maintaining physical and social boundaries. Singer (1981) casts such centripetal forces as purely intuitive, based on kin selection and tribalism, whereas the centrifugal forces are purely rational, an overcoming of intuition by deliberation and philosophical reflection. A similar argument was made by Jonathan Price (1790), who considered preference for one's own family and friends to be a blinding "delusion" and considered patriotism a "noble passion" which "requires regulation and direction" in order to be rationally expanded to universal benevolence.

But we argue that both of these forces can have both intuitive and rational bases. For instance, rational arguments have been made for centripetal over centrifugal morality. Arguments against centrifugal morality tend to take one of two forms. First, it is simply argued on philosophical grounds that people are obligated to care for close others before they care for distant others (Wraight, 2011). Second, it is often claimed that caring for distant others is less efficient (and thus less reasonable) than caring for close others. This second argument has been framed psychologically – caring for close others simply feels better and thus is easier and more sustainable than caring for distant others (Fleming, 2004). It has also been framed in economic terms, as in arguments that giving to distant others via foreign aid is at best economically inefficient and at worst actively harmful (Easterly & Easterly, 2006). At the same time, both centripetal and centrifugal moral forces can also have intuitive bases; one piece of evidence for the intuitive components comes from developmental studies of infants and very young children, to which we now turn.

2. Infancy and early childhood: Developmental evidence

Summarizing research on the developmental foundations of moral judgments and behaviors, van de Vondevoort and Hamlin (in press) note that “humans’ moral core should be present in infancy, remain intact throughout the lifespan, and constrain how experience and maturation in other domains influences moral development.” In this section we consider the earliest signs of the centripetal and centrifugal forces in the moral circle, indicating very early emergence of both parochial and egalitarian moral motivations, respectively.

2.1. Evidence for early parochialism

Centripetal preferences for ingroup members over outgroup members emerge very early in life. Experimentally manipulating language and accent to cue group membership, Kinzler and colleagues showed that 5-year-olds choose ingroup members over outgroup members for friendship, 10-month-olds prefer to take toys from someone speaking their own language, and 5-6-month-olds prefer to look at faces who had just spoken the ingroup language or accent (Kinzler, Dupoux, & Spelke, 2007). In line with this, 4-5-year-olds showed selective trust in native-accent over foreign-accent speakers, even when both were speaking gibberish (Kinzler, Corriveau, & Harris, 2011), and 12-month-old infants were more likely to select food endorsed by a woman speaking their native language than food endorsed by a woman speaking a foreign language (Shutts, Kinzler, McKee, & Spelke, 2009).

Preverbal infants between 9 and 12 months old have also been shown to prefer others who are similar to themselves (Mahajan & Wynn, 2012), and even prefer those who help similar others and harm dissimilar others in third-party judgments (Hamlin, Mahajan, Liberman, &

Wynn, 2013). Three-year-old children distribute resources in an ingroup-biased manner, giving more to siblings and friends than to strangers (Olson & Spelke, 2008). Similarly, 6-8-year-olds in competitive contexts distribute resources unfairly, giving more to those who gave to them previously (Shaw, Descioli, & Olson, 2012). Finally, in a very broad example of parochialism, infants show a basic prejudicial preference for humans over inanimate objects; specifically, 10-month-old infants prefer characters who comfort humans and shove objects, relative to characters who comfort objects and shove humans (Buon et al., 2014). Taken together, these studies indicate very early emergence of a centripetal force in the moral circle.

2.2. Evidence for early egalitarianism

Despite the evidence for very early parochialism, there are also signs of the centrifugal force pushing for expanding the moral circle in the first years of life as well. One such sign is the development of judgments and behaviors indicating a preference for fair and equal distributions of resources between self and non-kin others. Both early (Lane & Coon, 1972) and recent (Arsenio & Gold, 2006; Blake & Rand, 2010; Fehr et al., 2008) studies using economic games indicated that children don't show a preference for fair distributions until middle childhood, emerging as late as 8 years old. However, these economic games have been critiqued for lacking ecological validity, understandability, and social context (Sommerville, Schmidt, Yun, & Burns, 2013); studies using tasks providing such context have shown that three-year-olds react negatively to unequal distributions (LoBue, Nishida, Chiong, DeLoache, & Haidt, 2011), instruct a doll to distribute toys equally (Olson & Spelke, 2008), share rewards for a joint task equally with their collaborator (Warneken, Lohse, Melis, & Tomasello, 2011), and even take merit-based fairness into account when their collaborator does more work (Kanngiesser & Warneken, 2012).

Evidence for fairness preference appears even earlier in development as well. Infant studies using looking times in violation-of-expectation paradigms have shown greater attention to unequal vs. equal outcomes in 19-month-olds (Sloane, Baillargeon, & Premack, 2012), 16-month-olds (more so than 10-month-olds; Geraci vs. Surian, 2011), and 15-month-olds (more so than 12-month-olds; Schmidt & Sommerville, 2011). Based on these findings, infant cognition researchers have concluded that fairness expectations emerge in the second year of life; these expectations have even been shown to predict prosocial sharing behaviors among one-year-olds (Sommerville et al., 2013).

Altruistic helping behavior has also been demonstrated in one-year-old children, such as helping non-kin strangers accomplish their goals with no clear benefit to self (Brownell, Ramani, & Zerwas, 2006; Warneken & Tomasello, 2006). And a general preference for prosocial over antisocial characters (e.g., “helpers” vs. “hinderers” in a puppet show) has been shown in the approach/avoidance behavior of infants between 5 and 10 months old (Hamlin, Wynn, & Bloom, 2007; Hamlin & Wynn, 2011), the punishing/rewarding behavior of 8-month-old infants (Hamlin, Wynn, Bloom, & Mahajan, 2011), and even the looking behavior of 3-month-old infants (Kiley Hamlin, Wynn, & Bloom, 2010).

These studies demonstrate very early emergence of both parochialism and egalitarianism, suggesting that the intrapersonal moral conflicts shown in adults (e.g., fairness-loyalty tradeoffs; Waytz, Dungan, & Young, 2013) can be found in toddlerhood and infancy. While we cannot rule out experiential sources for the early emergence of centripetal and centrifugal forces, the developmental evidence nevertheless supports the possibility that these forces are at least in part rooted in intuitive predispositions, referred to as the “first draft of the moral mind” (Haidt &

Joseph, 2008). Of course, different cultures and societies may choose to revise this draft in very different ways.

3. Late childhood and adolescence: Moral education approaches

Disagreements over the proper size and structure of the moral circle are reflected in different pedagogical approaches to formal moral learning. Given that conservatives consistently endorse smaller moral circles than do liberals (distributing empathy preferentially to family vs. friends, countrymen vs. foreigners, and humans vs. nonhumans; Waytz, Iyer, Young, Haidt, & Graham, 2016), it is not surprising that debates about how to morally instruct children and adolescents frequently become ideological in nature. As Hunter (2000, p. 9) put it, “The significance of moral education is found in its articulation of the moral culture we adults idealize. It is a mirror of the moral culture we prize and thus seek to pass on to succeeding generations.” In this section we review the two major moral education traditions, one favoring the centripetal forces of attachment to close others, family loyalty, and patriotism, and one favoring the centrifugal forces pushing toward greater egalitarianism and inclusiveness of outer social circles. It is important to note that while these forces are linked to stable differences in moral preferences and judgments, many situational factors can momentarily make egalitarian or parochial concerns more salient, affecting whether people behave in line with centripetal or centrifugal forces in the moment (see e.g. Batson, Klein, Highberger, & Shaw, 1995; Waytz, Dungan, & Young, 2013).

3.1. Education approaches favoring centripetal forces

The term *character education* has been used to describe a group of related traditions and approaches to moral education, including virtue ethics, Christian ethics, and character development (Graham et al., 2008; Lapsley & Narvaez, 2006). These approaches most

commonly trace their traditions back to Aristotelian virtue ethics, as described in the *Nicomachean Ethics* (Aristotle, 350 BCE/1985). In ancient Greece, the goal of moral education was training children to be good community members, attending not only to their own interests but to the interests of the family and the polis as well. For Aristotle, while intellectual virtue could be simply acquired (as with learning new knowledge), moral virtue was like a muscle that had to be built up slowly via guided virtuous action, a muscle always at risk of atrophy from disuse. The habit of virtue pointed toward some mean between two excesses (e.g., courage as the mean between cowardice and rashness), but the proper mean varied by person and situation: it depended on the particular deficiencies and excesses of the individual, to be gauged by the educator. Thus a close bond between teacher and pupil was crucial for moral education, an inner-circle rapport marked by trust, fealty, and obedience.

Another important source for character education approaches is Emile Durkheim's *Moral Education* (1925/1961), which posits that the two core elements of morality are the spirit of discipline and attachment to groups. Both are essential for binding children to society: the spirit of discipline is the "cold" aspect of morality that constrains the child's will and motivates her toward duty; the attachment to groups is the "warm" aspect that makes the child want to fit in and be a valued group member. For Durkheim, society is the necessary source of moral obligation, duty, and aspirational moral goods, and so Durkheim's pedagogical recommendations for moral education rely heavily on punishment and rewards, creating a highly disciplined "society" in the school, and fostering empathy to attach children to their inner-circle social groups. These practices all involve centripetal forces, pulling for greater moral attention to – and loyalty toward – the closest inner circles of family, teacher, and immediate community.

These centripetal forces are apparent in the character- and discipline-focused youth organizations that proliferated in early-20th-century America, such as the Boy Scouts, Girl Scouts, and Young Men's/Women's Christian Association (Hunter, 2000). For instance, the core values of the YMCA/YWCA are care, honesty, respect, and responsibility, and for all four of these relations with close others in family and community are paramount. And in Boy Scouts and Girl Scouts, the "twelve points of the Scout Law" are to be trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty, brave, clean, and reverent (Peterson, 1984). It is important to note that while the centripetal aims of family loyalty, community pride, and patriotism were most important for these character education organizations, they were not specifically teaching *against* the centrifugal aims of egalitarianism (the way the ancient Spartans were specifically taught that outgroup derogation was a virtue; Cartledge, 2004).

3.2. Education approaches favoring centrifugal forces

A separate line of moral education approaches has explicitly favored centrifugal over centripetal moral forces. Universal benevolence has long been a focus of character education in the United States. Dating back at least to the early 19th century, legislatures often emphasized centrifugal morality when discussing education policy. For instance, a 19th-century Massachusetts statute called for teachers to "impress on the minds of the children...the principles of morality and justice [and] love of country, humanity and universal benevolence... which ornament human society" (Hunter, 2000). Similarly, statutes in Maine long stated that "Instructors of youth...shall use their best endeavors to impress on the minds of the children...the principles of morality and justice and a sacred regard for truth; love of country, humanity and a universal benevolence; the great principles of humanity as illustrated by kindness to birds and animals and regard for all factors which contribute to the well-being of man" (Title

20, Maine Revised Statutes Annotated, Section 1221). These programs thus urged both centripetal and centrifugal moral aims, with the centrifugal as the ultimate goal.

In the 20th century, one of centrifugal moral education's greatest advocates was the developmental psychologist Lawrence Kohlberg. The term *moral reasoning education* has been applied to the primarily Kohlbergian line of moral education approaches, also referred to as Kohlbergian moral education, rational moral development, or simply moral development (Graham et al., 2008). Kohlberg's philosophical thought traces back to Kant, but he was most directly influenced by Piaget. In his landmark book *The Moral Judgment of the Child* (1932/1997), Piaget observed boys playing games of marbles, and noted a developmental progression of continuous stages in the boys' application of the games' rules, from motor to egocentric to cooperation to codification. From these observations Piaget proposed cognitive-developmental stages of children's understanding of rules. Rather than focusing on fellow-feeling and attachment to close others, here the focus was on the individual child and her ever-increasing sophistication in understanding rules. Thus Piaget was a harsh critic of Durkheim's approach to moral education and its efforts to constrain children with authority and external discipline: "It is, as we said in connection with Durkheim, absurd *and even immoral* to wish to impose upon the child a fully worked-out system of discipline when the social life of children amongst themselves is sufficiently developed to give rise to that inner submission which is the mark of adult morality" (Piaget, 1932/1997, p. 404, emphasis added).

Kohlberg elaborated Piaget's continuous stages of rule-understanding into distinct cognitive-developmental stages of moral reasoning, still progressing from egocentrism to external authority to internal reasoning about moral principles. Kohlberg's (1969) stages advanced from self-interested motivations to avoid punishment and cooperate for mutual benefit,

progressing to internalizing rules of family, peer group, and laws of society. But obedience of local norms and rules were also stages to be progressed through, culminating in mature reasoning about moral principles regardless of social or cultural norms. For Kohlberg, following Kant (1785/1989) and Rawls (1970), the fundamental principles of moral reasoning were fairness, equality and justice, and moral development consisted in increasingly sophisticated understanding of these principles. Kohlberg felt that approaches centering on character or virtues did not promote the development of moral reasoning. Rather, Kohlbergian moral education sought to help students move from stage to stage by presenting them with moral dilemmas, discussing them, and requiring students to confront any contradictions between their answers and universal principles of fairness (Kohlberg & Turiel, 1971). While Aristotle, Burke, and Durkheim urged the development and exercise of parochial fellow-feelings as a necessary step toward expanding those feelings outward, moral reasoning approaches see parochialism as a step to be progressed through -- and then often explicitly condemned as a source of prejudice and a limit on distributing empathy in a more principled and fair way.

Today, moral educators' emphasis on centrifugal morality remains strong, as evidenced by the popularity of "global citizenship education" (GCE). Spurred on by the rise of globalization and an increasingly interconnected world, GCE programs emphasize the importance of "global consciousness." Recently, some of the most influential global institutions have introduced GCE programs, most notably OXFAM and UNESCO. Centrifugal morality plays a central role in OXFAM's GCE program, the primary goal of which is "Nurturing respect for all [and] building a sense of belonging to a common humanity" (Global Citizenship Education, 2016). Ultimately, through their GCE program, OXFAM "aims to empower learners to assume active roles to face and resolve global challenges and to become proactive contributors

to a more peaceful, tolerant, inclusive and secure world.” Given the rapid proliferation of GCE programs (the GCE movement is currently the fastest growing educational reform movement) and their widespread approval among parents, school administrators, politicians, and highly influential international organizations (Dill, 2013), centrifugal morality will likely be a defining feature of 21st-century moral education.

4. Implications for Moral Psychology

The idea of intrapersonally opposing forces in the moral circle can help us see moral thought and behavior in a new light. Here we focus on how these forces can help us understand current debates about empathy, debates about politics, and moral disagreement more generally.

4.1. Implications for normative debates about empathy

Emotional empathy has come under attack recently, by both philosophers (Prinz, 2011; Singer, 2015) and cognitive scientists (Bloom, 2013; 2014). These scholars critique the use of empathy as a guide to moral action precisely because of its parochial nature, its tendency to direct our moral concern toward inner circles more than toward outer circles. According to Bloom (2014), empathy’s parochialism can even lead to moral atrocities like war and genocide: “Empathy is the culprit here, not compassion or a sense of justice, because empathy is a parochial emotion, most powerfully elicited by the suffering of those close to us. It is empathy that drives us to feel that our dead children matter so much more than their dead children and thereby fuels war and atrocity.” While Bloom and Singer argue that the centripetal force of empathy should be countered by the rational centrifugal forces of utilitarian principles and effective altruism calculations (e.g., Singer, 2015), Prinz makes a case for the more intuitive and passionate centrifugal force of anger at injustice:

Righteous rage is a cornerstone of women's liberation, civil rights, and battles against tyranny. It also outperforms empathy in crucial ways: anger is highly motivating, difficult to manipulate, applicable wherever injustice is found, and easier to insulate against bias. We fight for those who have been mistreated not because they are like us, but because we are passionate about principles. Rage can misdirect us when it comes unyoked from good reasoning, but together they are a potent pair. Reason is the rudder; rage propels us forward" (Prinz, 2014).

Regardless of the particular centrifugal force they argue for, these thinkers all presuppose that such forces will be diametrically opposed to centripetal forces in a zero-sum fashion. Evidence for this zero-sum view comes from studies showing that close social connection can enable outgroup dehumanization (Waytz & Epley, 2012) and that making ingroup caregiving salient increases outgroup derogation in situations of outgroup threat (Gilead & Liberman, 2014). Although ingroup love and outgroup hate need not co-occur (Brewer, 1999; Hein, Engelmann, Vollberg, & Tobler, 2015), numerous studies document this pattern in intergroup contexts, particularly when intergroup threat is salient (Choi & Bowles, 2007). In one, children's tendency to distribute unfavorable resources to out-group members correlated with their tendency to distribute favorable resources to in-group members (Buttelmann & Böhm, 2014). Cross-cultural research shows cultures high in ingroup loyalty behave more aggressively toward outsiders (Cohen, Montoya, & Insko, 2006; Gelfand, Shteynberg, Lee, Lun, Lyons, Bell... & Soomro, 2012). And other studies show that administering oxytocin simultaneously increases ingroup cooperation and favoritism while increasing defensive aggression and derogation toward out-group members (De Dreu, Greer, Handgraaf, Shalvi, Van Kleef, Baas, ... & Feith, 2010; De Dreu, Greer, Van Kleef, Shalvi & Handgraaf, 2011).

The zero-sum opposition of centrifugal and centripetal forces is called into question by empathy's defenders. First is the argument that empathy is not a strictly limited resource the way time and money are, but rather depends flexibly on motivation (Cameron & Shanker, in press; Zaki, 2014; Zaki, in press). Second, if empathy is not a limited resource, then perhaps this

centripetal force can affectively fuel the outward expansion of parochial concern to increasingly distant others – in Zaki’s terms, “empathy lends affective ‘force’ to morality, such that empathy-based moral behavior produces benefits that other forms of moral action do not...individuals who act morally ‘with feeling’ are likely to be more committed to and fulfilled by their behaviors. Thus, to the extent that people can align their principles and affect, empathy can lend emotional meaning to moral actions” (Zaki, in press, p. 4). Here Zaki is echoing Burke’s (1790) notion that parochial fellow-feeling may be a *necessary* step on the way to expanding that feeling outward; rather than zero-sum competitors to be defeated, centripetal forces such as attachment and empathy are the fire in the engine, allowing for greater moral concern expanding outward. Empathy’s critics see this fire as inherently biased, losing heat the further out it goes, while empathy’s defenders suggest that motivations can be trained to direct this moral force at more distant social targets. (Interestingly, Zaki and Prinz both agree that the centrifugal forces must involve emotion to motivate action; they just disagree about what emotion that is.) Thus the idea of centrifugal and centripetal forces in the moral circle help us see that these debates on empathy come down to whether these forces are zero-sum competitors or allow for cooperation, with centripetal forces such as empathy helping to fuel centrifugal egalitarian goals. This is at base an empirical question for future work.

4.2. Implications for normative debates about politics

Several psychological theories have been developed to predict and explain ideological debates about morality. For instance, Moral Foundations Theory (Graham, Haidt, Koleva, Motyl, Iyer, Wojcik, & Ditto, 2013; Haidt & Joseph, 2008) posits multiple intuitive foundations for moral judgments, built upon to different degrees by different cultures; while liberals are particularly sensitive to Care/harm and Fairness/cheating concerns, conservatives are less so, but

are more likely than liberals to be concerned with Loyalty/betrayal, Authority/subversion, and Purity/degradation (Graham, Haidt, & Nosek, 2009; Graham et al., 2011). The “individualizing” concerns of maximizing care, fairness, and justice act as primarily centrifugal forces, expanding moral regard outward without prejudice, while the “binding” concerns of ingroup loyalty, authority, and purity act as primarily centripetal forces, focused on moral obligations to preference family over strangers, respect local traditions and hierarchies, and protect self and close others from moral contamination by outsiders.

Ideological differences in moral foundation endorsement are clear in different approaches to moral education (see Graham et al., 2008, for review). For instance, Lapsley and Narvaez (2006) list the specific virtues taught by over a dozen major character education programs covering the entirety of the 20th century. This list reveals virtues related to Care (compassion, caring, kindness, helpful, friendly, empathy, peacemaking, love) and Fairness (justice, due process, equality, fairness, equality of opportunity), but also virtues related to Loyalty (loyalty, teamwork, civic virtue, citizenship, trustworthiness, cooperation), Authority (respect, duty, obedience, law-abiding, respect for school property), and Purity (temperance, self-control, cleanliness, faithful to spouse, self-discipline). While character education teaches centripetal as well as centrifugal moral values, the moral reasoning education approaches teach centrifugal values more exclusively. For Kohlberg and Turiel (1971), justice concerns are the pinnacle of moral maturity, while virtues such as loyalty, respect, obedience, chastity and cleanliness are rejected as part of an “ethical relativism” that would equate morality with whatever the local community values. After a brief period of debate, Gilligan’s (1982) critique that morality is also about care was accepted by most Kohlbergians, and so the moral domain was expanded to include Care as well as Fairness. This preferencing of centrifugal over centripetal moral

foundations can be found in both Piaget's and Kohlberg's stages of moral reasoning, in which the highest "postconventional" stages are marked by a valuing of welfare and justice above the "conventional" concerns of group cohesion, respect for authority, and ingroup-defined decency. The ideological nature of such preferencing has been pointed out before (Emler et al., 1983).

Ideological disagreements about the importance of centrifugal versus centripetal morality also manifest in disagreements about the proper content of character education programs. As Hunter (2000) has written, the 18th and 19th centuries were times of relative moral consensus in America, and this consensus made it easy for educators to select the virtues they would teach to their students – they needed only select the virtues that they themselves considered most morally imperative. However, as America became more ethnically diverse, it also became more morally diverse, and with this heightened moral diversity came conflicts over *whose* morality students should be taught. At the heart of much of this conflict was and remains the question of whether to teach or ignore centripetal virtues such as loyalty and patriotism (Brighouse, 2006; Hand, 2011; Hunter, 2000; Kodelja, 2011); whereas some consider the teaching of centripetal morality to be worthless, and could even be dangerous (Nussbaum, 2011), others consider its absence in modern character education programs to be a highly regrettable omission (Archard, 1999).

Another theoretical account of moral disagreements across political divides is the Model of Moral Motives (Janoff-Bulman & Carnes, 2013), which distinguishes proscriptive regulation (aimed at preventing the morally bad) from prescriptive regulation (aimed at promoting the morally good). At the group level, where most ideological disagreements occur, this results in conflicts between proscriptive concerns of social order (favored by conservatives more than liberals) vs. prescriptive concerns of social justice (favored by liberals more than conservatives). While social justice concerns are primarily centrifugal in nature (urging for expansion of moral

regard, as in women's rights, civil rights, and gay rights movements), social order concerns are primarily centripetal (urging for protecting ingroups and maintaining hierarchies). This fits well with Hibbing and colleagues' (Hibbing, Smith, & Alford, 2014) theory that ideological differences are rooted in conservatives' greater sensitivity to negativity and threat; centrifugal expansion of one's circle of moral regard is most possible in times of relative safety, while threats tend to cause people to retract their circles, favoring the ingroup and supporting nonegalitarian social hierarchies more (e.g., conservative shift after 9/11; Landau et al., 2004; Nail & McGregor, 2009).

Despite their differences, all of these models of ideology suggest that liberals will be more likely than conservatives to respond to centrifugal moral forces, and conservatives will be more likely than liberals to respond to centripetal forces. Supporting this across nine studies, Waytz and colleagues found this predicted ideological differences at multiple levels of moral circles, including family vs. friends, nation vs. world, and humans vs. nonhumans, concluding that "Liberals expend empathy toward larger, farther, less structured, and more encompassing social circles, whereas conservatives expend empathy toward smaller, closer, more well-defined, and less encompassing social circles" (Waytz et al., 2016, p.2). This difference can be observed playing out across countless political debates; to pick just one, white liberals were more likely to support the "Black Lives Matter" movement, showing centrifugal concern for a disadvantaged outgroup, while white conservatives countered this with "All Lives Matter," threatened by the perceived preferencing of outgroup over ingroup. Despite this linear difference across the ideological spectrum, it should be noted that one could be a moral absolutist for either moral force (e.g., seeing only one force as the true moral force rather than trying to balance them), in

line with theories of ideological extremity and moral conviction (Crawford & Pilanski, 2014; Skitka, Morgan, & Wisneski, 2015).

5. Conclusion

Centripetal and centrifugal forces in the moral circle emerge extremely early in life, constrain moral learning across development, and color moral arguments in the larger culture. Moral debates between cultures, political ideologies, and individuals often come down to disagreements about how these competing forces should be balanced and adjudicated. Examining these as intrapersonal forces developing over time helps us see that such conflicts begin within individuals, not between them. This corresponds more generally to a pluralist view of morality, allowing for multiple moral concerns and forces that can come into conflict with one another even within a single individual at a single point in time.

References

- Archard, D. (1999). Should we teach patriotism?. *Studies in Philosophy and Education*, 18, 157-173.
- Aristotle. (350 BCE/1985). *Nicomachean Ethics*. T. Irwin, trans. Indianapolis: Hackett Publishing Company.
- Arsenio, W. F., & Gold, J. (2006). The effects of social injustice and inequality on children's moral judgments and behavior: Towards a theoretical model. *Cognitive Development*, 21, 388–400.
- Batson, C. D., Klein, T. R., Highberger, L., & Shaw, L. L. (1995). Immorality from empathy-induced altruism: When compassion and justice conflict. *Journal of Personality and Social Psychology*, 68, 1042-1054.
- Blake, P. R., & Rand, D. G. (2010). Currency value moderates equity preference among young children. *Evolution and Human Behavior*, 31, 210–218.
- Bloom, P. (2014). Against empathy. *The Boston Review*.
- Brighouse, H. (2006). *Should schools teach patriotism. On Education*. London: Routledge, 95-114.
- Brownell CA, Ramani GB, Zerwas S. (2006). Becoming a social partner with peers: Cooperation and social understanding in one- and two-year-olds. *Child Development*, 77, 803–821.
- Buon, M., Jacob, P., Margules, S., Brunet, I., Dutat, M., Cabrol, D., & Dupoux, E. (2014). Friend or foe? Early social evaluation of human interactions. *PLOS ONE*, 9, e88612.
- Burke, E. (1790). *Reflections on the Revolution in France*. London: Dodsley.
- Buttelmann, D., & Böhm, R. (2014). The ontogeny of the motivation that underlies in-group bias. *Psychological Science*, 0956797613516802.

- Cameron, C.D., & Shanker, K. (in press). Compassion is a motivated choice. To appear in W. Sinnott-Armstrong (Ed.), *Moral Psychology, Vol 5: Virtues and Vices*.
- Cartledge, P. (2004). *The Spartans : the world of the warrior-heroes of ancient Greece, from utopia to crisis and collapse*. New York: Vintage Books.
- Choi, J. K., & Bowles, S. (2007). The coevolution of parochial altruism and war. *science*, 318(5850), 636-640.
- Cohen, T. R., Montoya, R. M., & Insko, C. A. (2006). Group morality and intergroup relations: Cross-cultural and experimental evidence. *Personality and Social Psychology Bulletin*, 32(11), 1559-1572.
- Crawford, J. T. & Pilanski, J. M. (2014). Political intolerance, right *and* left. *Political Psychology*, 35, 841-851.
- Crimston, D., Bain, P.G., Hornsey, M., & Bastian, B. (in press). Moral expansiveness: Examining variability in the extension of the moral world. *Journal of Personality and Social Psychology*.
- De Dreu, C. K., Greer, L. L., Handgraaf, M. J., Shalvi, S., Van Kleef, G. A., Baas, M., ... & Feith, S. W. (2010). The neuropeptide oxytocin regulates parochial altruism in intergroup conflict among humans. *Science*, 328, 1408-1411.
- De Dreu, C. K., Greer, L. L., Van Kleef, G. A., Shalvi, S., & Handgraaf, M. J. (2011). Oxytocin promotes human ethnocentrism. *Proceedings of the National Academy of Sciences*, 108, 1262-1266.
- Dill, J. S. (2013). *The longings and limits of global citizenship education: The moral pedagogy of schooling in a cosmopolitan age* (Vol. 109). Routledge.

- Durkheim, E. (1961). *Moral Education: A Study in the Theory and Application of T.* Free Press Of Glencoe.
- Easterly, W., & Easterly, W. R. (2006). *The white man's burden: why the West's efforts to aid the rest have done so much ill and so little good.* Penguin.
- Emler, N., Renwick, S., & Malone, B. (1983). The relationship between moral reasoning and political orientation. *Journal of Personality and Social Psychology*, 45, 1073-1080.
- Fehr, E., Bernhard, H., & Rockenbach, B. (2008). Egalitarianism in young children. *Nature*, 454, 1079–1083.
- Fleming, T. (2004, September). Economics and Christian Social Morality: the Catholic case for economic nationalism. Retrieved from: <http://www.freerepublic.com/focus/news/1213313/posts>.
- Gelfand, M., Shteynberg, G., Lee, T., Lun, J., Lyons, S., Bell, C., ... & Abdel-Latif, A. H. (2012). The cultural contagion of conflict. *Phil. Trans. R. Soc. B*, 367, 692-703.
- Geraci, A., & Surian, L. (2011). The developmental roots of fairness: Infants' reactions to equal and unequal distributions of resources. *Developmental Science*, 14, 1012–1020.
- Gilead, M., & Liberman, N. (2014). We Take Care of Our Own: Caregiving Salience Increases Out-Group Bias in Response to Out-Group Threat. *Psychological Science*, 0956797614531439.
- Gilligan, C. (1982). *In a different voice.* Harvard University Press.
- Global Citizenship Education (2016, February). Retrieved February, 2016, from <http://en.unesco.org/gced>

- Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S., & Ditto, P. H. (2013). Moral Foundations Theory: The pragmatic validity of moral pluralism. *Advances in Experimental Social Psychology*, *47*, 55-130.
- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, *96*, 1029-1046.
- Graham, J., Haidt, J., & Rimm-Kaufman, S. E. (2008). Ideology and intuition in moral education. *European Journal of Developmental Science*, *2*, 269-286.
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, *101*, 366-385.
- Haidt, J., & Joseph, C. (2008). The moral mind: How 5 sets of innate moral intuitions guide the development of many culture-specific virtues, and perhaps even modules. In P. Carruthers, S. Laurence, and S. Stich (Eds.) *The Innate Mind, Vol. 3*. New York: Oxford, pp. 367-391.
- Hamlin, J. K., Mahajan, N., Liberman, Z. & Wynn, K. (2013a). Not like me = bad: Infants prefer those who harm dissimilar others. *Psychological Science*, *24*(4): 589-594.
- Hamlin, J. K., & Wynn, K. (2011). Young infants prefer prosocial to antisocial others. *Cognitive Development*, *26*(1), 30-39.
- Hamlin, J. K., Wynn, K., & Bloom, P. (2007). Social evaluation by preverbal infants. *Nature*, *450*, 557-559.
- Hamlin, J. K., Wynn, K., Bloom, P., & Mahajan, N. (2011). How infants and toddlers react to antisocial others. *Proceedings of the national academy of sciences*, *108*(50), 19931-19936.
- Hand, M. (2011). Should we promote patriotism in schools?. *Political Studies*, *59*(2), 328-347.

- Hein, G., Engelmann, J. B., Vollberg, M. C., & Tobler, P. N. (2016). How learning shapes the empathic brain. *Proceedings of the National Academy of Sciences*, *113*, 80-85.
- Hibbing, J. R., Smith, K. B., & Alford, J. R. (2014). Differences in negativity bias underlie variations in political ideology. *Behavioral and Brain Sciences*, *37*, 297-307.
- Hunter, J. D. (2000). *The Death of Character: Moral education in an age without good or evil*. New York: Basic Books
- Janoff-Bulman, R., & Carnes, N. C. (2013). Surveying the moral landscape moral motives and group-based moralities. *Personality and Social Psychology Review*, *17*, 219-236.
- Kanngiesser, P., & Warneken, F. (2012). Young children consider merit when sharing resources with others. *PloS one*, *7*(8), e43979.
- Kant, I. (1785/1989). *Foundations of the Metaphysics of Morals*. Beck, L.W., trans. and ed. New York: Prentice Hall.
- Kiley Hamlin, J., Wynn, K., & Bloom, P. (2010). Three- month- olds show a negativity bias in their social evaluations. *Developmental science*, *13*(6), 923-929.
- Kinzler, K. D., Dupoux, E., & Spelke, E. S. (2007). The native language of social cognition. *Proceedings of the National Academy of Sciences*, *104*(30), 12577-12580.
- Kinzler, K. D., Corriveau, K. H., & Harris, P. L. (2011). Children's selective trust in native-accented speakers. *Developmental science*, *14*(1), 106-111.
- Kodelja, Z. (2011). Is education for patriotism morally required, permitted or unacceptable?. *Studies in philosophy and education*, *30*(2), 127-140.
- Kohlberg, L. (1969). *Stages in the development of moral thought and action*. New York, NY: Holt, Rinehart & Winston.

- Kohlberg, L., & Turiel, E. (1971). *Moral development and moral education*. publisher not identified.
- Krebs, D. L., & Denton, K. (2005). Toward a more pragmatic approach to morality: a critical evaluation of Kohlberg's model. *Psychological review*, 112(3), 629.
- Landau, M. J., Solomon, S. & Greenberg, J. (2004). Deliver us from evil: The effects of mortality salience and reminders of 9/11 on support for President George W. Bush. *Personality and Social Psychology Bulletin*, 30, 1136–1150.
- Lane, I. M., & Coon, R. C. (1972). Reward allocation in preschool children. *Child Development*, 43, 1382–1389.
- Lapsley, D., & Narvaez, D. (2005). Moral psychology at the crossroads. In D. Lapsley & C. Power (Eds.), *Character Psychology and Character Education* (pp. 18-35). University of Notre Dame Press.
- Lecky, W.E.H. (1869). *A History of European Morals from Augustus to Charlemagne, Vol. 1*. New York, NY: D. Appleton & Co.
- LoBue, V., Nishida, T., Chiong, C., DeLoache, J. S., & Haidt, J. (2011). When getting something good is bad: Even three-year-olds react to inequality. *Social Development*, 20, 154–170.
- Mahajan, N., & Wynn, K. (2012). Origins of “us” versus “them”: Prelinguistic infants prefer similar others. *Cognition*, 124(2), 227-233.
- Maine Revised Statutes Annotated, Title 20, Section 1221.
- Nail, P. R. & McGregor, I. (2009). Conservative shift among liberals and conservatives following 9/11/01. *Social Justice Research* 22, 231–40.
- Noddings, N. (1992). Social studies and feminism. *Theory & Research In Social Education*, 20(3), 230-241.

- Nussbaum, M. C. (2011). Teaching patriotism: Love and critical freedom. *The University of Chicago Law Review* 2012: 213–250.
- Olson, K. R., & Spelke, E. S. (2008). Foundations of cooperation in young children. *Cognition*, 108, 222–231.
- Peterson, Robert W. (1984). *The Boy Scouts: An American Adventure*. American Heritage.
- Piaget, J. (1932). *The moral judgment of the child*. London, England: Kegan Paul, Trench, Trubner and Co.
- Price, R. (1790). *A Discourse on the Love of Our Country*. Stafford.
- Prinz, J. (2011). Against empathy. *The Southern Journal of Philosophy*, 49, 214–233.
- Prinz, J. (2014). Against empathy [comment on Bloom]. *The Boston Review*.
- Rawls, J. (1970). *A theory of justice*. Cambridge, MA: Harvard University Press
- Schmidt, M. F. H., & Sommerville, J. A. (2011). Fairness expectations and altruistic sharing in 15-month-old human infants. *PLoS ONE*, 6, e23223.
- Shaw, A., DeScioli, P., & Olson, K. R. (2012). Fairness versus favoritism in children. *Evolution and Human Behavior*, 33(6), 736–745.
- Shutts, K., Kinzler, K. D., McKee, C. B., & Spelke, E. S. (2009). Social information guides infants' selection of foods. *Journal of Cognition and Development*, 10(1-2), 1–17.
- Singer, P. (1975). *Animal Liberation*. New York: Random House.
- Singer, P. (1981). *The Expanding Circle*. Oxford: Clarendon Press.
- Singer, P. (2015). *The Most Good You Can Do: How Effective Altruism Is Changing Ideas About Living Ethically*. New Haven, CT: Yale University Press.

- Skitka, L. J., Morgan, G. S., & Wisneski, D. C. (2015). Political orientation and moral conviction: A conservative advantage or an equal opportunity motivator of political engagement. *Social psychology and politics*, 57-74.
- Sloane, S., Baillargeon, R., & Premack, D. (2012). Do infants have a sense of fairness? *Psychological Science*, 23, 196–204.
- Sommerville, J. A., Schmidt, M. F. H., Yun, J., & Burns, M. (2013). The development of fairness expectations and prosocial behavior in the second year of life. *Infancy*, 18, 40-66.
- Terry, F. (2013). *Condemned to repeat?: The paradox of humanitarian action*. Cornell University Press.
- Turiel, E. (1983). *The development of social knowledge: Morality and convention*. Cambridge University Press.
- Van de Vondevoort, J., & Hamlin, J. K. (in press). The infantile roots of sociomoral evaluations. In Gray, K., & Graham, J. (Eds.), *The Atlas of Moral Psychology*. New York: Guilford.
- Warneken, F., Lohse, K., Melis, A. P., & Tomasello, M. (2011). Young children share the spoils after collaboration. *Psychological Science*, 22, 267–273.
- Warneken, F., & Tomasello, M. (2006). Altruistic helping in human infants and young chimpanzees. *Science*, 311, 1301-1303.
- Waytz, A., Dungan, J., & Young, L. (2013). The whistleblower's dilemma and the fairness–loyalty tradeoff. *Journal of Experimental Social Psychology*, 49, 1027-1033.
- Waytz, A., & Epley, N. (2012). Social connection enables dehumanization. *Journal of Experimental Social Psychology*, 48, 70-76.
- Waytz, A., Iyer, R., Young, L., & Graham, J. (in press). Ideological differences in the expanse of empathy. In P. Valdesolo & J. Graham (Eds.), *The Social Psychology of Ideological*

Polarization (Claremont Series on Applied Social Psychology). New York, NY: Taylor and Francis.

Waytz, A., Iyer, R., Young, L., Haidt, J., & Graham, J. (2016). Your ambit of concern: Political ideology, empathy distribution, and the expanse of the moral circle. Manuscript submitted for publication.

Wraight, C. D. (2011). *The ethics of trade and aid: development, charity or waste?*. Bloomsbury Publishing.

Zaki, J. (2014). Empathy: A motivated account. *Psychological Bulletin*, *140*, 1608- 1647.

Zaki, J. (in press). Empathy is a moral force. In K. Gray & J. Graham (Eds.), *The Atlas of Moral Psychology*. New York: Guilford Press.

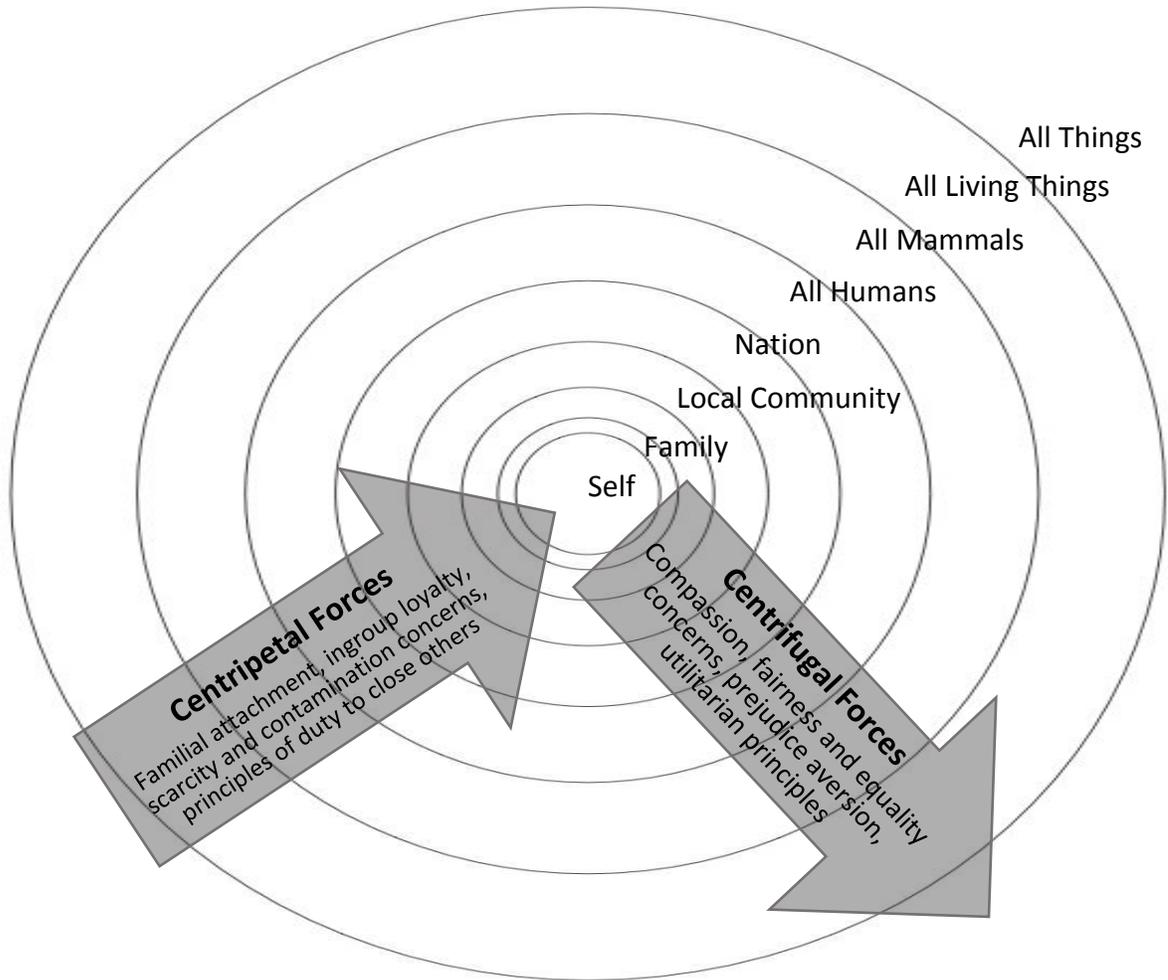


Figure 1. Centripetal and centrifugal forces in the moral circle, and associated intuitive and deliberative factors.