# Innate Human Connectivity and Śāntideva's Cultivation of Compassion

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A fundamental question about humans is simply this: why are we so different from other primates, especially the non-human great apes or hominids? If we adopt an evolutionary perspective and consider a very long-term view of history, the great apes—chimpanzees, bonobos, orangutans, and gorillas—are our not-so-distant relatives, yet in many of our abilities we humans far exceed them. Some of the latest scientific research in multiple disciplines suggests that the difference lies in a fundamental capacity for a behavior that many primates exhibit, but only humans have brought to its highest level: the ability to cooperate.[1] None of our near-relatives in the primate world can cooperate in the way that we can, and among the various capacities required for the heightened level of cooperation that humans exhibit, perhaps the most important is the ability to work toward a common goal by connecting to others, in part by extending our sense of self into a broader social group that shares that objective. When that goal is understood to be the universal human aim of relieving suffering and achieving authentic happiness, Śāntideva's *Bodhicaryāvatāra* becomes highly relevant to these scientific considerations, especially in terms of approaches to cultivating compassion. Likewise, the science of human cooperation and its evolutionary development illuminates certain aspects of Śāntideva's approach to developing compassion.

While various interpretations of Śāntideva's method for cultivating compassion exist, the one proposed here will differ from some of the more recent scholarly interpretations.[2]

Inspired in part by certain strands of the scientific literature on the evolution of cooperative cognition, I will argue that Śāntideva assumes that his audience has an innate capacity for compassion that is inhibited by a self-other distinction that involves a false sense of self. Thus, enhancing compassion for others is not a matter of increasing one's feelings of love, warmth or care for others; indeed, Śāntideva almost entirely avoids any such "warm fuzzy" language. Nor does compassionate connection with others result from being convinced by an argument that this is the only rational way to behave. Instead, for Śāntideva the cultivation of compassion in relatively inexperienced practitioners is a matter of disrupting the cognitive models that inhibit their innate capacity to sense and respond to all suffering, including the suffering of others. As we will see, this interpretation helps to deal with some puzzling issues in the *Bodhicaryāvatāra,* and it will also point to some practical implications for further research on the cultivation of compassion.

## 1   Gleanings from the Science of Cooperation

Although a growing literature on compassion and its cultivation can be found in current psychology,[3] my interpretation of Śāntideva's approach to cultivating compassion will draw instead on a few elements within the highly interdisciplinary study of the emergence of highly complex cooperation as a distinctively human capacity. In a rather selective way, in this section I will discuss current theories in research in two general areas: the innate tendency for humans to connect to other humans and the ways that humans also disconnect from others.

## 1.1   Human Connectivity

The current scientific consensus maintains that, while our nearest primate relatives have a capacity for rudimentary social cognition, they are not observed to cooperate in the complex and rich way that humans do. On this account, our primate relatives do not exhibit those cooperative behaviors primarily because they lack the mental capacity for them. As Michael Tomasello, puts it, "In general, humans are able to coordinate with others, in a way that other primates seemingly are not, to form a 'we' that acts as a kind of plural agent to create everything from a collaborative hunting party to a cultural institution".[4] For example, our nearest primate relatives are the chimpanzees, and as with humans, at least some bands of chimpanzee hunt other animals. When humans hunt, they can engage in a kind of "shared intentionality," such that each member of the hunting party adopts distinct roles so that the group as a whole may succeed. In contrast, the most straightforward interpretation of chimpanzee behavior is that they engage in a kind of "parallel hunting," where each one seeks to capture the prey for himself (only males hunt). Thus, while a limited degree of cooperation occurs, chimpanzees do not cooperate in the robust way that humans do.[5] And for scientists such as Tomasello, chimpanzees and other great apes cannot attain a human-level of cooperation precisely because they lack the capacity for the type of complex social cognition that enables humans to bond closely together through a shared sense of "we."[6]

The capacities for social cognition that enable humans to cooperate at such a high level permit us to engage in amazing feats of joint action, such as building airplanes, performing symphonies and flying to the moon. Yet all this comes at a price: to engage in that level of social cognition, humans need extremely large brains. For various reasons, this means that

human infants come into the world in a highly vulnerable state, and in comparison to other animals, tremendous resources are required to raise human infants to the point that they can contribute productively to their families and communities [REFS]. This resource-burden is so great that, unlike chimpanzees and other great apes, a human mother cannot possibly raise her child without significant assistance from others. Human child-rearing thus requires the kind of cooperation that only humans exhibit. More importantly, this also means that human infants must have an innate capacity to connect emotionally to multiple human caretakers, and not just their mothers (Hrdy 2014 etc).

When all this is examined from an evolutionary perspective, an intriguing interconnection emerges. On the one hand, our robust capacity for cooperation is clearly a tremendous evolutionary advantage: we have been remarkably successful as a species. On the other hand, in order to have enough resources to develop the brain capacity for that level of cooperation, human infants must have the ability to connect readily to multiple caretakers to a degree that chimpanzees and other great apes do not. There are thus converging forces that drive a profound capacity for social connectivity in humans: some of these forces come from the mental abilities needed to cooperate, which provides an evolutionary advantage, and others come from the capacities that enable a vulnerable human infant to bond emotionally with other humans, which is evolutionarily necessary for the infant's survival. The upshot of this evolutionary story is that, at birth, we already connect deeply with others in a way that enables us to eventually engage in a level of cooperation that is unique to humans. As the neuroscientist Jim Coan puts it, the human brain *expects* to connect socially to others.[7]

## 1.2    Learning Disconnection

On the account sketched above, humans come into the world with an innate capacity for a high level of social and emotional connectivity that results from various evolutionary forces, yet as they develop, humans also learn to disconnect. Although a matter of some debate, it appears that young infants initially do not clearly distinguish themselves from others; instead, this self/other distinction develops over time such that a reliable ability to attribute emotional states and beliefs to others requires three or more years to develop.[8] This self/other distinction results in part from expected patterns of brain development, but it is also highly dependent on contextual factors, such as family dynamics and culture. As proponents of Attachment Theory argue, this means that as infants learn to differentiate self from other, they can develop various styles of relating to others, and because they are largely learned, these attachment styles can also change in adulthood, perhaps even through a therapeutic process.[9]

Drawing on the science of social cognition, another mode of disconnection concerns not the basic self/other distinction, but rather the distinction between an "in-group" and an "out-group." This distinction relates directly to cooperation; that is, an "in-group" includes those humans with whom one is ready to cooperate toward the achievement of shared goals, while one is not poised to cooperate with members of an "out-group," often because they do not share those goals, or are even opposed to them. Since the degree of social connection with others depends on this distinction, one's attention and responsiveness to others' states also depends on whether they are part of one's in-group. One's sensitivity to another's pain, for example, and one's responsiveness to others' needs both vary in

dependence on this distinction, such that one is usually far more sensitive and responsive to the pain and emotional states of one's in-group.[10]

Three features of the in-group/out-group distinction are especially relevant to Śāntideva's approach to cultivating compassion. First, in a way that echoes a human infant's bonds with its caregivers, it seems likely that we are sensitive and responsive to members of our in-group because our own sense of self actually extends to the in-group. Thus, something that harms my in-group is in some sense also harming me, to the point that my neural representations of my own pain closely resemble the neural representations that occur when I see pain being experienced by someone in a close relationship to me.[11] This "inclusion of the self in other" is especially clear in close relationships, but it also applies to more distant members of my in-group.[12]

Second, this in-group/out-group distinction is highly dependent on cultural and contextual influences. As the infamous Stanford Prison Experiment shows, one can create this distinction just by assigning different forms of dress and roles to arbitrary groups of people. And once the distinction has been induced, the sensitivity to the needs or pain of the in-group—and insensitivity or even callousness toward the outgroup—are quickly exhibited in behavior.[13] This contextual nature of the distinction points to the possibility to manipulate in-group/out-group configurations.

Third, and in a more positive vein, in many cases the in-group/out-group distinction can often be eliminated or at least reduced through training or experimental manipulations.[14] In relation to Śāntideva's approach, an especially intriguing finding is that maintaining an in-group/out-group distinction, even unconsciously, appears to require some cognitive effort. Thus, when David Rand and colleagues asked experimental subjects

to consider an act of generosity toward a stranger (i.e., someone who is not a member of one's in-group), the subjects were *more* generous when they had *less* time to think. In other words, in a way that reflects the fundamental social connectivity of humans, the default behavior tends toward being helpful and generous, an experimental finding that is "consistent with work demonstrating spontaneous helping behavior in young children."[15] The intriguing suggestion here is that enhancing one's caring attitude toward others may be achieved simply by inhibiting the learned tendency to not care as much for "strangers," namely, those who are not part of our in-group. If we can unlearn or suspend this exclusion of others, then by default they become part of the socially extended sense of self—and the extended sphere of care—that is our default state.

## 2   Śāntideva's Approach

Turning now to Śāntideva's approach to compassion, one might immediately wonder, "Why bother with all this science?" This question points to a key assumption that I bring to the text, namely, that Śāntideva is writing from the standpoint of his own experience, and he is conveying to "those of similar propensities" (*matsamadhātu*) techniques that will work for them because they have worked for him in the past. When he speaks, for example, of the fear of rebuke from a teacher as a powerful motivator for mindfulness (BCA 5.30), or when he berates himself for being lazy (7.14), the flavor of the text is highly practical and experiential. In this sense, the *Bodhicaryāvatāra* can often be read as a record of the tips and tricks that have helped Śāntideva over the course of his contemplative career.

With this assumption in place, the foray into science that began this chapter makes good sense because it can help us to understand various aspects of the practices he

recommends, especially his approach to cultivating compassion. Specifically, what we have gleaned is that, over the course of our evolution, we humans have developed a deep and innate capacity to connect to other humans in a way that often involves extending our sense of self to them, such that a harm to these others is experienced as a harm to self. When we do not care for others, it is due to their exclusion in an out-group, that is, their identification as "other," and not part of "self." This type of distinction, however, is to a great extent learned, and it also requires some cognitive resources to maintain, such that if those cognitive structures or resources are disrupted, our default tendency for caring generally emerges.  If we use this scientific lens to examine Śāntideva's techniques for cultivating compassion, a clearer picture of his approach emerges, for if we can assume that somehow Śāntideva discovered a set of contemplative techniques that helped him to care more for others, the science may provide some insight as to why those techniques worked for him.

In any case, as recent scholarship demonstrates [REF], we certainly do need a clearer picture of what Śāntideva is up to because the text as it stands has been a source of considerable confusion and debate. For our purposes, the most problematic passage consists in a set of contemplations for the cultivation of the type of compassion required of the bodhisattva. This passage is found in the chapter on meditation (*bhāvanā*) beginning at verse 90 and proceeding to at least verse 139, although the entire rest of the chapter can be conceived as providing additional contemplations connected to cultivating compassion. In the main passage on the cultivation of compassion, two issues have puzzled interpreters: first, the text contains various arguments, but these arguments are much less consistent than one would expect of Śāntideva, whose capacity for sharp and rational debate becomes

clear in the subsequent chapter that focuses on wisdom (*Prajñā*). Second, to the extent that

a clear philosophical argument forms part of the contemplation, it does not reach the level

of analysis expected of Śāntideva, whose final position is the Madhyamaka philosophy of

emptiness. In other words, the arguments in the compassion contemplation appear to be

contradicted by the philosophy of emptiness articulated in the wisdom chapter. As it turns

out, these two puzzles are the product of a failure to appreciate several contextual features

of the compassion contemplation, so before examining that contemplation itself, let us

appreciate its overall context.

## 2.1   The Context

An appreciation of the context for Śāntideva's techniques for contemplating

compassion will eliminate the puzzles mentioned above, and three aspects of that context

are especially important: the pragmatic use of compassion as an aid to generating wisdom;

the notion that there are multiple levels of conventional reality; and the explicit use of

certain kinds of afflictive mental states (*kleśa*), especially confusion (*moha*), as a practical

method for advancing on the bodhisattva.

In terms of the pragmatic use of compassion as an aid to generating wisdom, this

emerges clearly from Śāntideva's own statement at the beginning of the wisdom chapter,

which immediately follows the contemplation on compassion. In the very first verse of the

wisdom chapter, Śāntideva states, "The sage [i.e., the Buddha] taught this entire collection

for the sake of wisdom. Therefore, with the desire to eliminate suffering, one should

generate wisdom" (BCA 9.1). As the Sanskrit commentator Prajnākaramati makes clear,

Śāntideva is here referring to the entire contents of the text up to that point. Those

contents, conceptualized as the first five "perfections" (*pāramitā*) for a bodhisattva's training, are understood to be the "method" (*upāya*) for obtaining complete awakening or buddhahood, and compassion itself is the final and crucial element in this collection of methods.[16] As noted elsewhere in this volume, the motivation for engaging in the practice of these various methods is *bodhicitta,* the aspiration to achieve buddhahood for the purpose of eliminating the suffering of all sentient beings. As was well known to Śāntideva, and as Prajnākaramati attests, compassion and the other methods on the bodhisattva path cannot themselves eliminate suffering; this can be accomplished only through wisdom, specifically the wisdom that knows all persons and things to be empty of essence or fixed identity. Nevertheless, compassion and the other methods are necessary prerequisites for cultivating the wisdom of emptiness in a way that enables one to achieve complete awakening.[17]

With all this in mind, it should be obvious that the philosophical context of the compassion contemplation cannot be the wisdom of emptiness. Śāntideva is quite clear that compassion is an aid to realizing emptiness, and not the other way around, and given the order of the chapters, it is also clear that the compassion contemplation is directed at the practitioner who has not yet generated that wisdom.[18] Thus, to the extent that Śāntideva deploys arguments in the compassion contemplation, they are pragmatically aimed at inducing the kind of compassion that will serve as a support for generating wisdom.

This pragmatic approach to the use of argumentation and analysis is also explicitly endorsed by Śāntideva in the wisdom chapter when he discusses the well-known rubric of the "two realities" (*satyadvaya*) (BCA 9.2-4). He speaks of the ultimate reality

(*paramārthasatya*), which Prajnākaramati, following standard Madhyamaka theory, identifies as "essencelessness" (*niḥsvabhāvatā*) or simply (*śūnyatā*); and he likewise speaks of the conventional reality (*saṃvṛtisatya*). Śāntideva then notes that there are levels of conventional reality; the most basic level is the world of ordinary, untrained beings (*prākṛtako lokaḥ*), and as Prajnākaramati notes, the conventional reality at this lowest level is what these ordinary beings take to be truly real from the standpoint of their deeply confused minds.[19] Then, in a way that echoes other Buddhist thinkers, Śāntideva notes that there is a higher level of conventional reality, namely, the world as it appears to contemplatives, which Prajnākaramati identifies specifically as Buddhist practitioners. Śāntideva continues to assert further levels of conventional reality from the perspectives of contemplatives who are at further stages of development. Finally, at this point, Śāntideva makes a key statement. He notes that to help someone on a lower level move to a higher level, the world as experienced from the lower level of conventional reality must be refuted from the standpoint of the higher level. To do so, one employs "examples accepted by both"—i.e., by both the person on the lower level and the one on the higher level—"*without analysis, for the sake of the goal*" (*dṛṣṭāntenobhayeṣṭena kāryārtham avicārataḥ*, BCA 9.4cd).

Without getting into the technical aspects of Mādhyamika philosophy, we can simply note that, with this final phrase, Śāntideva is pointing to a well-known issue for all Madhyamaka thinkers.[20] Suppose, for example, that a Madhyamaka philosopher is debating with another Buddhist philosopher who maintains that matter in the form of atoms truly and ultimately exists. From the Madhyamaka perspective, that other Buddhist philosopher is at a lower level of understanding (and thus inhabits a lower level of conventional reality) because, according to the Madhyamaka atoms actually do not exist. However, "for the sake

of the goal," which is to convince the other thinker that there are no atoms, the Madhyamaka philosopher must find a way to talk about things like atoms in a provisional way; otherwise, communication will be impossible. To do so, the Madhyamaka philosopher suspends "analysis" (*vicāra*) just enough to allow him to communicate with that confused person. Otherwise, if the Madhyamaka philosophers simply argue from the highest level of conventional reality, persons at lower levels will not be able to understand; they cannot simply jump to the highest level directly.

This pragmatic approach to argument appears in many contexts, and in academic work it is described as adopting "levels of analysis."  These levels of analysis are often articulated in terms of Buddhist philosophical schools that are hierarchically ranked, and in one mode of training, practitioners deliberately start at a lower level and then move to a higher one, precisely because the higher one is not immediately accessible to them.[21] The basic idea is that philosophical perspectives at a lower level include more confusion (*moha*), and this is what makes it difficult to move immediately to the highest level. Instead, one proceeds through levels of analysis that gradually peel away layers of confusion until one finally reaches the highest level of analysis, which for Śāntideva is the Madhyamaka philosophy of emptiness. Importantly, this now raises the role that confusion itself plays in Śāntideva's cultivation of compassion.

As Stephen Jenkins notes,[22] confusion (*moha*) plays a central role in Śāntideva's account of compassion. The special role that confusion plays is related to a more general aspect of Śāntideva's method: the use of *kleśa*s or afflictive mental states as a means to progress on the spiritual path. He says:

I will be relentless in slaughtering the *kleśa*s!

> I will be tenacious in this, and girded with enmity, I will wage war,
> Except not against those *kleśa*s that are useful for killing *kleśa*s. (BCA 4.42cd-43)

These verses themselves illustrate their own point, for here a kind of hostility, which is itself a *kleśa*, is being directed toward the *kleśa*s themselves. The point here, in any case, is that even though all *kleśa*s must eventually be eliminated because *kleśa*s necessarily cause suffering, one can still provisionally make use of certain *kleśa*s. This technique is especially useful for practitioners near the start of the bodhisattva path, since their minds are still very much filled with *kleśa*s. And it is even more useful in the case of confusion itself, for confusion—also known as ignorance (*avidyā*)—persists to at least some degree until one has attained complete buddhahood.[23] Thus, *every* bodhisattva has some degree of confusion, so it is not surprising that Śāntideva might find some use for it on the path.

The bodhisattva's use of confusion is introduced by Śāntideva in the wisdom chapter when he raises an objection, "If no sentient being exists, then for whom is there compassion?" (BCA 9.76ab).[24] In other words, according to Madhyamaka philosophy, sentient beings do not ultimately exist; in that case, compassion seems problematic—how could one have compassion for someone who does not really exist?

In response, Śāntideva says that one has compassion for "the one who is conceptualized through confusion that has been provisionally adopted for the sake of the goal" (9.76cd; cited by JENKINS). Here again we see this important phrase: "for the sake of the goal" (*kāryārtham*). Just as Madhyamakas may provisionally suspend a certain level of analysis so as to engage with others who are stuck at a lower level of conventional reality, so too they may provisionally accept the existence of sentient beings by using confusion in a way that will enable them to achieve the goal of complete awakening or Buddhahood. To clarify even further, Śāntideva adds another objection: "But if there is no sentient being, for

whom is the goal?" That is, one provisionally accepts confusion so as to achieve the goal of complete buddhahood, but if there are no sentient beings, then who benefits from the goal? And who achieves it? Śāntideva answers in a similar way: "For the sake of ending suffering, confusion about the goal is not eliminated." From the ultimate Madhyamaka perspective, there are no beings, and there are also no goals. Yet our confused notion that beings and goals exist can nevertheless be useful on the path.

## 2.2    Cultivating Compassion: Redrawing the In-Group, Disrupting the Self

The context of Śāntideva's instructions for cultivating compassion point to three key features. First, the bodhisattva's compassion involves at least some degree of confusion, so we should not expect these instructions to presuppose that the practitioner can operate from the final, ultimate standpoint of buddhahood. Second, and along these same lines,  the practical aim of these instructions is to induce compassion as an aid to cultivating the wisdom articulated in the next chapter, so it would be odd for Śāntideva to expect his audience to already be able to operate from the ultimate standpoint of wisdom. And third, Śāntideva explicitly endorses the use of provisionally accepted arguments that actually do not hold up in the long run, as long as they are useful for the practical goal of moving practitioners along the path.

With these contextual issues in place, Śāntideva's actual instructions point to an intriguing possibility: they are primarily targeting the self/other distinction and the notion of self altogether, such that it is primarily by altering or disrupting these conceptualizations that compassion will emerge. And if we assume that this type of contemplation is what actually worked for Śāntideva, a psychological account of why this process worked emerges from our previous discussion about the innate connectivity that humans share.

As Garfield, Jenkins and Priest have pointed out,[25] the core of Śāntideva's contemplation is found in verses 90-103 of the meditation chapter. Several reliable translations already exist,[26] and rather than reproduce these verses here, I will summarize their content and point to two themes: the notion that self and other are the same in a way that extends self into other, and the critique of the self concept. As we will see, these two themes conflict, but keeping in mind the context of this compassion practice, we can treat these two strands of argumentation as pragmatic attempts at inducing compassion while working at different levels of analysis. In that case, the conflict between these themes is not problematic.

The first theme, the equality of self and other, is the main emphasis in verses 90 to 96, although it surfaces to some degree in the second half of this section. This theme points specifically to the problematic nature of the self/other distinction in the context of suffering (*duḥkha*) and happiness (*sukha*), which can also be translated as pain and pleasure. A central motif is that others are "like me" (*ātmavat*) in that they also wish to be happy and do not wish to suffer. He thus begins the contemplation by saying that "All are equal in [their experience of] suffering and happiness, and I should protect them all, just as I do myself" (8.90).[1] Śāntideva next likens the distinction between self and other to the distinctions that differentiate the parts of one's own body, such as hands and feet. The clear implication here is that, just as the sense of self extends to the whole body, so too it can extend to include others. The next two verses then show that our common goal of avoiding suffering and achieving happiness is even rooted in the same fundamental problem of self-attachment (*ātmasneha*), with the clear implication that, sharing the same fundamental

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[1] Translations in this section are based on Wallace and Wallace, sometimes with considerable modification.

problem, we should work together to overcome it. Finally, verse 94 is perhaps the peak of this part of the contemplation:

> I should eliminate the suffering of others, just like my own suffering
> I should care for others because they are sentient beings, just as I am a sentient being.

If taken as a rational argument that is meant to persuade a skeptic by force of reason, the first four verses of the contemplation seem rather inadequate. If, however, they are read in light of the innate psychological traits and capacities that bind humans together, these verses could be very effective. By putting us all in the same metaphorical boat of suffering and happiness, they resonate with our impulse for cooperation, and with the refrain of "like me," they invite us to extend our sense of self to an in-group that includes all sentient beings who are in this predicament together. Likewise, simply by referring to suffering, these verses prime us for the kind of spontaneous responsivity to others' suffering that generally characterizes the default state that is generally manifest starting in infancy. In a way that simply may have been intuitive for Śāntideva, this part of the contemplation clearly could be effective in evoking a compassion stance toward others by drawing on our innate tendencies. In essence, Śāntideva has created a type of psychological manipulation that alters our in-group by drawing on our connectivity in relation especially to both cooperation and suffering. As noted above, such manipulations are known to be effective.

The next part of the contemplation involves two verses that can be read as transitioning from the breakdown of the self/other distinction to the critique of the self-concept. With the previous verses inducing the sense that all sentient beings are members of our in-group, these verses point out that we are not behaving appropriately toward that in-group, which itself draws on the kinds of expectations that arise with in-group identities.

These verses basically ask, what is special about me that I am not caring for these other beings, who are effectively part of my in-group? On the hand, these verses thus continue the motif of reconfiguring one's sense of in-group, but they also begin an inquiry about the nature of one's self.

The inquiry into one's concept of self is the uniting theme for the remainder of the verses in this core section of the contemplation, and this inquiry is best interpreted as a "leveling up" in terms of the philosophical context for these verses. In the beginning of the contemplation, the sense of self was left untouched, in part so that one can see others as "just like me." Now, moving to a higher level of analysis, the very notion of self is critiqued. From a philosophical perspective, this shift in level of analysis can seem problematic, since it appears to undermine the sense of self assumed at the start of the contemplation, but as a step in a psychological process of inducing compassion, it has great potential. As noted earlier, it appears that the in-group/out-group distinction requires some cognitive effort, and also that it emerges from a more basic self-other distinction. Thus, critiquing the sense of self with a philosophical argument could erode that distinction and promote compassion in two ways simultaneously. On the one hand, by undermining the sense of self, the critique removes the foundation for distinguishing an in-group from an out-group, since that distinction depends on a more basic separation of self from other. On the other hand, by creating a cognitive load that is intensified by the counterintuitive notion that the self does not truly exist, the effort to maintain the self/other and in-group/out-group distinctions is disrupted to at least some degree.  The kind of caring that emerges from our innate psychological tendencies, and which has been primed by the start of the contemplation, might thus have a chance to express itself more fully.

## 3    Conclusion: Some Implications

On the interpretation offered here, I have assumed that Śāntideva's instructions for cultivating compassion are based upon his own experience. In other words, according to this assumption, Śāntideva believed that this contemplation actually increased his own compassion, and he thus taught this approach to others. With this assumption in place, the obvious question is: why did this work? If read as a purely rational argument, Śāntideva's contemplation seems rather inadequate, especially in comparison to the far sharper arguments presented in the wisdom chapter. It is hard to believe that he would have found them philosophically or rationally persuasive. I have instead proposed that, deliberately or not, Śāntideva came up with an approach to compassion that effectively manipulates our own innate tendencies in a way that could be highly effective in enhancing and broadening our compassionate attitudes and behaviors, and given the overall context of the compassion contemplation, this interpretation seems preferable to one that attempts to render it as a philosophically persuasive argument.

At the same time, Śāntideva's approach raises some questions for ongoing research in multiple domains. Within the study of Buddhism, a key question is the applicability of this analysis to other contexts: do we see similar inductions of compassion elsewhere? More broadly, did Buddhists over the centuries develop other manipulations that were effective in changing attitudes and behaviors, and might it be fruitful to examine them from the standpoint of contemporary theories in psychology, cognitive science and other such domains? Finally, for researchers in the various scientific disciplines involved in the study of compassion and empathy, there are also intriguing implications of Śāntideva's approach. In particular, his strong emphasis on cognitive—rather than affective or emotional—

manipulations may suggest that, for at least some people, the key to cultivating compassion

has more to do with the way we think than the way we feel.

## Bibliography

Aron, Arthur, Elaine N. Aron, and Christina Norman. "Self-Expansion Model of Motivation and Cognition in Close Relationships and Beyond." In *Blackwell Handbook of Social Psychology: Interpersonal Processes*, edited by Garth J. O. Fletcher and rgaret S. Clark, 478–501. Blackwell Publishers Ltd, 2003.

Beckes, Lane, and James A. Coan. "Social Baseline Theory: The Role of Social Proximity in Emotion and Economy of Action." *Social and Personality Psychology Compass* 5, no. 12 (2011): 976–988.

Blass, Thomas, Philip G Zimbardo, Christina Maslach, and Craig Haney, eds. "Reflections on the Stanford Prison Experiment: Genesis, Transformations and Consequences." In *Obedience to Authority: Current Perspectives on the Milgram Paradigm*, 193–237. Mahwah, New Jersey: Lawrence Erlbaum Associates, 2000.

Cassidy, Jude, Phillip R. Shaver, and Arietta Slade, eds. "Attachment and Adult Psychotherapy: Theory, Research, and Practice." In *Handbook of Attachment, Third Edition: Theory, Research, and Clinical Applications*, 759–79. New York: Guilford Publications, 2016.

Coan, James A., and David A. Sbarra. "Social Baseline Theory: The Social Regulation of Risk and Effort." *Current Opinion in Psychology* 1 (2015): 87–91.

Coan, Jim, Paul Condon, Brooke Dodson-Lavelle, John D. Dunne, and John Makransky. "Meaning and Method: Scientific and Contemplative Perspectives on Compassion." Conference Panel presented at the 2016 International Symposium for Contemplative Studies, San Diego, CA, November 11, 2016.

Dahl, Cortland J., Antoine Lutz, and Richard J. Davidson. "Reconstructing and Deconstructing the Self: Cognitive Mechanisms in Meditation Practice." *Trends in Cognitive Sciences* 19, no. 9 (September 2015): 515–23. https://doi.org/10.1016/j.tics.2015.07.001.

Dreyfus, Georges. *Recognizing Reality: Dharmakīrti's Philosophy and Its Tibetan Interpretations*. Albany, NY: State University of New York Press, 1997.

Dreyfus, Georges B. J, and Sara L McClintock, eds. *The Svatantrika-Prasangika Distinction: What Difference Does a Differencence Make?* Studies in Indian and Tibetan Buddhism. Boston: Wisdom Publications, 2003.

Dunne, John D. "Buddhism, Schools of: Mahāyāna Philosophical Schools of Buddhism." In *Encyclopedia of Religion*, edited by Lindsay Jones, 2nd ed., 2:1203–13. Detroit: Macmillan Reference USA, 2005.

———. *Foundations of Dharmakīrti's Philosophy*. Boston: Wisdom Publications, 2004.

Garfield, Jay L. "Buddhist Ethics in the Context of Conventional Truth: Path and Transformation." In *Moonpaths: Ethics and Emptiness*, edited by The Cowherds, 77–95. New York: Oxford University Press, 2016.

Garfield, Jay L., Stephen Jenkins, and Graham Priest. "The Śāntideva Passage: *Bodhicaryāvatāra* VIII.90-103." In *Moonpaths: Ethics and Emptiness*, edited by The Cowherds, 54–76. New York: Oxford University Press, 2016.

Hein, Grit, and Tania Singer. "I Feel How You Feel but Not Always: The Empathic Brain and Its Modulation." *Current Opinion in Neurobiology*, Cognitive neuroscience, 18, no. 2 (2008): 153–58. https://doi.org/10.1016/j.conb.2008.07.012.

Hrdy, Sarah B. "Development+ Social Selection in the Emergence of 'emotionally Modern' Humans." In *New Frontiers in Social Neuroscience*, 57–91. Springer, 2014. http://link.springer.com/chapter/10.1007/978-3-319-02904-7_5.

Jenkins, Stephen. "Waking into Compassion: The Three *Ālambana* of *Karuṇā*." In *Moonpaths: Ethics and Emptiness*, edited by The Cowherds. New York: Oxford University Press, 2016.

Lewis, Michael. "Emotional Development and Consciousness." In *Handbook of Child Psychology and Developmental Science, Theory and Method*, edited by Richard M. Lerner, Willis F. Overton, and Peter C. M. Molenaar, 7th edition., 1:407–51. Hoboken, N.J: Wiley, 2015.

Marvin, Robert S, Preston A Britner, and Beth S Russel. "Normative Development: The Ontogeny of Attachment in Childhood." In *Handbook of Attachment, Third Edition: Theory, Research, and Clinical Applications*, edited by Jude Cassidy and Phillip R. Shaver, 273–90. New York: Guilford Publications, 2016.

McClintock, Sara L. *Omniscience and the Rhetoric of Reason: Śāntarakṣita and Kamalaśīla on Rationality, Argumentation, and Religious Authority*. Boston: Wisdom Publications, 2010.

Mina Cikara, and Jay J. Van Bavel. "The Neuroscience of Intergroup Relations: An Integrative Review." *Perspectives on Psychological Science* 9, no. 3 (May 1, 2014): 245–74. https://doi.org/10.1177/1745691614527464.

Olsson, Andreas, Jeffrey P. Ebert, Mahzarin R. Banaji, and Elizabeth A. Phelps. "The Role of Social Groups in the Persistence of Learned Fear." *Science (New York, N.Y.)* 309, no. 5735 (July 29, 2005): 785–87. https://doi.org/10.1126/science.1113551.

Olsson, Andreas, and Elizabeth A. Phelps. "Social Learning of Fear." *Nature Neuroscience* 10, no. 9 (September 2007): 1095–1102. https://doi.org/10.1038/nn1968.

Prajñākaramati. "*Bodhicaryāvatārapañjikā*." In *Bodhicaryāvatāra of Śāntideva with the Commentary Pañjikā of Prajñākaramati.*, edited by P.L. Vaidya. Buddhist Sanskrit Texts, No. 12. Darbhanga, India: The Mithila Institute, 1960.

Rand, David G. "Cooperation, Fast and Slow: Meta-Analytic Evidence for a Theory of Social Heuristics and Self-Interested Deliberation." *Psychological Science* 27, no. 9 (September 1, 2016): 1192–1206. https://doi.org/10.1177/0956797616654455.

Rand, David G., Joshua D. Greene, and Martin A. Nowak. "Spontaneous Giving and Calculated Greed." *Nature* 489, no. 7416 (September 2012): 427. https://doi.org/10.1038/nature11467.

Śāntideva. *A Guide to the Bodhisattva Way of Life*. Translated by Vesna A. Wallace and B. Alan Wallace. Ithaca, N.Y., USA: Snow Lion, 1997.

Shonin, Edo, William Van Gordon, Angelo Compare, Masood Zangeneh, and Mark D. Griffiths. "Buddhist-Derived Loving-Kindness and Compassion Meditation for the Treatment of Psychopathology: A Systematic Review." *Mindfulness* 6, no. 5 (October 1, 2015): 1161–80. https://doi.org/10.1007/s12671-014-0368-1.

Tomasello, Michael. *A Natural History of Human Thinking*. Harvard University Press, 2014.

Tomasello, Michael, and Malinda Carpenter. "Shared Intentionality." *Developmental Science* 10, no. 1 (January 1, 2007): 121–25. https://doi.org/10.1111/j.1467-7687.2007.00573.x.

## Recommended Readings

Beckes, Lane, and James A. Coan. "Social Baseline Theory: The Role of Social Proximity in Emotion and Economy of Action." *Social and Personality Psychology Compass* 5, no. 12 (2011): 976–988.

Dahl, Cortland J., Antoine Lutz, and Richard J. Davidson. "Reconstructing and Deconstructing the Self: Cognitive Mechanisms in Meditation Practice." *Trends in Cognitive Sciences* 19, no. 9 (September 2015): 515–23. https://doi.org/10.1016/j.tics.2015.07.001.

Garfield, Jay L., Stephen Jenkins, and Graham Priest. "The Śāntideva Passage: Bodhicaryāvatāra VIII.90-103." In *Moonpaths: Ethics and Emptiness*, edited by The Cowherds, 1 edition., 54–76. New York: Oxford University Press, 2016.

Hrdy, Sarah B. "Development + Social Selection in the Emergence of 'Emotionally Modern' Humans." In *New Frontiers in Social Neuroscience*, 57–91. Research and Perspectives in Neurosciences. Springer, 2014.

Jenkins, Stephen. "Waking into Compassion: The Three Ālambana of Karuṇā." In *Moonpaths: Ethics and Emptiness*, edited by The Cowherds. New York: Oxford University Press, 2016.

Tomasello, Michael. *A Natural History of Human Thinking*. Harvard University Press, 2014.

[1] The most developed evolutionary argument, along with a review of the relevant literature, is found in Tomasello, *A Natural History of Human Thinking*.

[2] See especially Garfield, Jenkins, and Priest, "The Śāntideva Passage: *Bodhicaryāvatāra* VIII.90-103"; Jenkins, "Waking into Compassion: The Three *Ālambana* of *Karuṇā*"; Garfield, "Buddhist Ethics in the Context of Conventional Truth: Path and Transformation."

[3] See Shonin et al., "Buddhist-Derived Loving-Kindness and Compassion Meditation for the Treatment of Psychopathology" for a review focused on clinical outcomes; and for a broader view that integrates compassion practice into an overall framework, see Dahl, Lutz, and Davidson, "Reconstructing and Deconstructing the Self."

[4] Tomasello, *A Natural History of Human Thinking*, 3.

[5] Tomasello, 33–38.

[6] Tomasello, 80–123; Tomasello and Carpenter, "Shared Intentionality"; Hrdy, "Development+ Social Selection in the Emergence of 'emotionally Modern' Humans."

[7] Coan et al., "Meaning and Method: Scientific and Contemplative Perspectives on Compassion"; see also Coan and Sbarra, "Social Baseline Theory"; Beckes and Coan, "Social Baseline Theory."

[8] Lewis, "Emotional Development and Consciousness."

[9] Marvin, Britner, and Russel, "Normative Development: The Ontogeny of Attachment in Childhood"; Cassidy, Shaver, and Slade, "Attachment and Adult Psychotherapy: Theory, Research, and Practice," 771–72.

[10] Mina Cikara and Jay J. Van Bavel, "The Neuroscience of Intergroup Relations."

[11] Hein and Singer, "I Feel How You Feel but Not Always."

[12] Aron, Aron, and Norman, "Self-Expansion Model of Motivation and Cognition in Close Relationships and Beyond."

[13] Blass et al., "Reflections on the Stanford Prison Experiment: Genesis, Transformations and Consequences."

[14] Olsson and Phelps, "Social Learning of Fear"; Olsson et al., "The Role of Social Groups in the Persistence of Learned Fear."

[15] Rand, Greene, and Nowak, "Spontaneous Giving and Calculated Greed," 429; see also Rand, "Cooperation, Fast and Slow."

[16] Prajñākaramati, "*Bodhicaryāvatārapañjikā*," 168–70.

[17] Prajñākaramati, 168.

[18] This point is well argued by Jenkins, "Waking into Compassion: The Three *Ālambana* of *Karuṇā*."

[19] Prajñākaramati, "*Bodhicaryāvatārapañjikā*," 170–71.

[20] This isssue is the focus of the excellent work by Dreyfus and McClintock, *The Svatantrika-Prasangika Distinction*.

[21] Dunne, *Foundations of Dharmakīrti's Philosophy*; Dunne, "Buddhism, Schools of"; McClintock, *Omniscience and the rhetoric of reason*; Dreyfus, *Recognizing Reality*.

[22] Jenkins, "Waking into Compassion: The Three *Ālambana* of *Karuṇā*," 102–8.

[23] Dunne, "Buddhism, Schools of."

[24] With a few small variations, my analysis of this material follows Jenkins, "Waking into Compassion: The Three *Ālambana* of *Karuṇā*," 102–11.

[25] Garfield, Jenkins, and Priest, "The Śāntideva Passage: *Bodhicaryāvatāra* VIII.90-103."

[26] I especially recommend the translation by Wallace and Wallace: Śāntideva, *A Guide to the Bodhisattva Way of Life*.