Compassion and Ethics:

Scientific and Practical Approaches to the Cultivation of Compassion as a Foundation for Ethical Subjectivity and Well-Being

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Abstract

Recent years have seen a rapid growth in interest in the study of meditation and its health benefits, attention now broadening beyond simple relaxation techniques to other forms of meditation that involve the cultivation of positive mental states and emotions such as compassion. The scientific study of compassion suggests that compassion may be of crucial importance for our individual physical and psychological health. Moreover, because compassion relates fundamentally to how we as human beings relate to one another, its cultivation entails an ethical dimension that may be just as important as the medical and psychological dimension. In this article we supplement the emerging scientific literature on compassion by laying out a case for understanding compassion as a moral emotion intimately tied to the question of ethics and the cultivation of ethical sensibility. Second, we examine the individual and social benefits of compassion that support such a view. Thirdly, we describe in detail one method for the cultivation of compassion: Cognitively-Based Compassion Training (CBCT). We conclude by presenting current research programs employing CBCT and point to possible future directions in the study of compassion and its cultivation.

Keywords: compassion, empathy, ethics, meditation, education

Introduction

Recent years have seen a quickly growing interest in the scientific study of contemplative practices. Although much of this work has dealt primarily with meditation techniques for quieting and focusing the mind as a tool for reducing stress, increasing attention is being paid to styles of meditation that actively cultivate positive emotions such as compassion and that also appear to have significant health benefits. The scientific study of compassion may be of crucial importance for our individual physical and psychological health. Second, compassion relates fundamentally to how we as human beings relate to one another when it comes to questions of happiness and suffering. As such, compassion and its cultivation have an ethical dimension that may be just as important as the medical and psychological dimension.

In this article we offer a supplement to the growing scientific literature on compassion by laying out a case for understanding compassion as a moral emotion intimately tied to the question of ethics and the cultivation of ethical sensibility. Second, we examine the individual and social benefits of compassion that support such a view. Thirdly, we describe in detail one method for the cultivation of compassion that draws from this view: Cognitively-Based Compassion Training (CBCT), an intervention designed to improve well-being and ethical sensibility by leading participants through a systematic process to cultivate powerful and unbiased compassion to others. Fourthly, we provide an overview of our current research programs employing the CBCT method in elementary school, foster child, adult, and other populations, and point to possible future directions in the study of compassion and its cultivation.

Compassion and Ethics

Today in the early years of the 21st century, the common global situation of humanity is such that the question of the place of ethics in our world is perhaps the most central question of our time. An analysis of the most pressing problems facing humanity, whether they are political, economic, social or environmental, shows that their causes lie fundamentally in human choices, and those choices are largely shaped by values. Ethical principles and values, however, can neither be bought through economic means nor legislated and enforced through policy and laws. This means that the solution to such problems can not merely depend on legal, political and economic systems or the reform of such systems (although naturally such reforms could still play a beneficial role), but also needs to involve the inculcation of values that reach the level of inner conviction. This is above all an ethical task.

Note 1. Although contemporary understandings of secular ethics are often restricted to agreed upon practices separate from the emotional and moral subjectivity of individuals, as in the case of much of contemporary medical and bioethics, the broader view of ethics presented here is in fact very old and can be seen clearly in pre-Socratic Greek philosophy, where philosophy meant more than a set of principles or abstract truths about the world, but rather referred to a way of life that brought well-being and flourishing, embodied in the being of the philosopher-teacher to his or her students. For a lucid examination of how pre-Socratic philosophy gradually shifted from this ideal, see Pierre Hadot's *What is Ancient Philosophy?* (Hadot, 2004). The observation that all people (and even animals) seek well-being and happiness, rather than suffering and misery, has been made by philosophers and religious thinkers throughout the ages, ranging from Aristotle to St. Augustine. It is agreed upon as a foundational maxim even by individuals who hold wildly differing worldviews and views on religion, such as the present Dalai Lama and the outspoken critic of religion, Sam Harris.

Here we are understanding ethics broadly, whereby ethics is not merely confined to an external code or a set of principles of right and wrong, or correct and incorrect practices (which, when upheld, can lead to harming others instead of helping them). Ethics can instead be understood more broadly as a way of conceptualizing how human beings relate to one another and their environment with specific regard to suffering and its alleviation. This

is because, despite all the cultural and religious differences that may seem to stand in the way of a common ethical ground for human life and interaction, one thing that humanity shares in common is the wish for happiness and well-being for oneself and one's loved ones, while not wanting harm or suffering for oneself and one's loved ones. Importantly, this general definition of ethics can apply to anyone regardless of religious belief or lack thereof. Moreover, such a definition shows that, since suffering and its alleviation are chief concerns of individuals and societies irrespective of place, time, religion or culture, ethics must be a principle concern of human beings everywhere. Although broad, this definition is not so all-encompassing that it ends up rendering nothing ethical by rendering everything ethical, since there will naturally be actions that have a greater impact on human suffering and its alleviation than others. Furthermore, since the outcomes of actions can be difficult to predict, the role of intention and motivation is important.

If we adopt this perspective on ethics, we see the centrality of human values and in particular values like compassion. Compassion is a deep feeling of wishing to alleviate the suffering of others (Gilbert, 2005; Goetz, Keltner & Simon-Thomas, 2010; Gyatso, 2001). Compassion can serve as a fundamental basis for human values and ethics, precisely because a central problem of ethics is suffering and well-being. When compassion is present in a person's mind, that person cannot harm or further the suffering of the people to whom they feel compassion; on the contrary, their actions will work towards the alleviation of those persons' suffering. When compassion is absent from a person's mind, that person can engage in actions that are harmful to others if they benefit the person him- or herself. It is such self-serving actions, absent of compassion, that are responsible for most of the world's ills, whether they are economic inequality, armed conflicts, or environmental irresponsibility. This is likely the reason that His Holiness the Dalai Lama has suggested in his book *Ethics for the New Millennium* that compassion can serve as a foundation for a "secular ethics," by which he means not an anti-religious ethics, of course, but rather an ethics based on fundamental human values irrespective of a person's religious beliefs or lack thereof (Gyatso, 2001).

Two central questions, or sets of questions, therefore emerge. First of all, is it true that compassion is beneficial for an individual and a society, and if so, what are those benefits, and do they outweigh the costs? Secondly, if compassion does have benefits that outweigh the costs, then is it something that can be individually and socially cultivated? Up until recently, such questions could only be addressed philosophically or theologically, but an emerging science of compassion is beginning to address these questions in a practical way.

The Scientific Basis for Compassion

In his recent book *The Age of Empathy*, primatologist Frans de Waal surveys a growing body of empirical evidence to argue that our common perception of evolution as a Machiavellian or Hobbesian story of "every creature for itself," with a self-centered drive for individual survival as our most basic instinct, is largely distorted, if not altogether wrong (de Waal, 2009). For de Waal, empathy is a crucial ingredient and basis for feeling compassion for others, and in line with the presentation made above, de Waal sees empathy and compassion as fundamentally moral capacities. He makes the case that the roots of moral sentiments go back quite far in our evolutionary history: in his opinion, at least as far back as the last common ancestor of birds and mammals, since both benefit from maternal care of offspring (F. de Waal, personal communication). Morality, de Waal argues, rests on an ability to empathize

with others, and this in turn depends on an ability to take another's perspective (cognitive empathy) and resonate with them emotionally (affective empathy). Although de Waal does not claim that full-blown morality and empathy are present in non-human primates and other species, he does see plenty of evidence for their pre-requisite capacities, namely motor mimicry, consolation behavior, cooperation, a sense of self, and targeted helping (de Waal, 2009).

De Waal argues that his work shows that human nature is not rotten at the core while covered by a thin veneer of morality, but rather that the roots of empathy, compassion and morality run deep in our evolutionary history. If so, it should come as no surprise that they also seem to run deep in our developmental trajectory, as shown by the work of developmental psychologist Philippe Rochat. His work on the early development of empathy, self/other distinctions, and social cognition illustrates a powerful need for affiliation from infancy on. This "basic drive to be acknowledged in one's own existence through the eyes of others" (Rochat, 2009, 314) in turn gives rise to what Rochat calls "the mother of all fears," namely the fear of social rejection and isolation, which can lead to all manner of ills. Cacioppo and Hawkley (2009) note that, "Research indicates that perceived social isolation (i.e. loneliness) is a risk factor for, and may contribute to, poorer overall cognitive performance, faster cognitive decline, poorer executive functioning, increased negativity and depressive cognition, heightened sensitivity to social threats, a confirmatory bias in social cognition that is self-protective and paradoxically self-defeating, heightened anthropomorphism and contagion that threatens social cohesion." The fact that loneliness and perceived social rejection and isolation can even lead to suicide (Ozawa-de Silva, 2008, 2010) should be evidence enough that as human beings our need for social connection and acceptance is just as strong, if not stronger, than our instinct for survival.

Thus, there is good reason for the change in our scientific and philosophical view of human nature away from one of self-centeredness and isolation to one of social connection. As Jackson, Meltzoff, and Decety (2005) point out, "Evolutionary, developmental, social, and neuroscience perspectives stress the importance for survival of investing positively in interpersonal relationships, and understanding one's own as well as others' emotions, desires, and intentions." Recent work in mirror-neurons, although preliminary, is being interpreted to present even more evidence for this (Jackson, Meltzoff, & Decety, 2005), but they likely form only one part of a larger emerging picture. As Rochat and Passos-Ferreira write, "Human sociality entails more than the equivalence and connectedness of perceptual experiences. It corresponds to the sense of a shared world made of shared values. It originates from complex 'open' systems of reciprocation and negotiation, not just imitation and mirroring processes that are by definition 'closed' systems' (Rochat & Passos-Ferreira, 2008, p.191).

This change in our perception of human nature, suggesting that we are evolutionarily and neurologically "wired for connectivity," allows us to better make sense of why practices that enhance our sense of connectivity with others, such as compassion training, might show positive effects on our physical and mental health. In a study of adepts who engaged in long-term compassion training, Lutz and his colleagues found that the adepts generated strong activation in the left prefrontal cortex, a brain area associated with positive affect and feelings of well-being, when they engaged in compassion meditation, as well as levels of gamma synchrony previously unrecorded in non-pathological contexts (Lutz, Greischar, Rawlings, Ricard, & Davidson, 2004; Lutz, Brefczynski-Lewis, Johnstone & Davidson, 2008). In a study employing the CBCT method for cultivating compassion

that we will discuss later in this article, members of our research team found that training in compassion even among beginners results in significant improvements in immune function in response to psychosocial stress (Pace et al., 2008, 2009). Social and clinical psychologists have reported psychological benefits that arise from the related practice of self-compassion (Neff et al., 2005, 2007). Neff (2011b) writes that research suggests that "self-compassion provides greater emotional resilience and stability than self-esteem, but involves less selfevaluation, ego-defensiveness, and self-enhancement than self-esteem." More broadly, scholars in the health sciences have begun paying an increased attention to the important role empathy plays in health care (Larson, 2005; Norfolk, Birdi, & Walsh, 2007); medical anthropologists have argued for the need for an increased focus on questions of existential suffering and moral experience in medicine and care-giving (Halifax, 2011; Kleinman, 2006; Ozawa-de Silva & Ozawa-de Silva, 2010); and the study of non-western medical systems, such as Tibetan medicine, suggests that when such systems conceptualize the mind and body as interdependent, rather than separate and unrelated, compassion can be seen not merely as part of a so-called "placebo effect" but rather as a central element of patient care with effects on health outcomes (Ozawa-de Silva & Ozawa-de Silva, 2011).

While scientists in diverse fields are more recently pointing out the importance of compassion for human happiness and well-being, the idea that the cultivation of a prosocial moral subjectivity is essential for the good life is very old in the history of ethical thought, both in the west (Hadot, 2004) and the east (Gyatso, 2001). In the view of the Dalai Lama, one of the champions of the idea of compassion as a foundation for ethical thought and action, this is fundamentally because the essence of a meaningful life lies in not harming others but rather, if possible, benefiting them (H.H. the Dalai Lama, public talk, July 9, 2011, Washington DC.). As he points out, having a warm-hearted attitude and a sense of affection and caring toward others eases our communication and interaction with others, since we tend to see others more as potential friends and fellow human beings rather than potential enemies and "others" who are alien, strange and different to us. Seeking others' well-being means that one is far less likely to engage in behaviors that promote self-interest while harming others. Since such dishonorable and unethical actions always have to be hidden from public view, one consequently also has fewer secrets to hide from others, allowing one to be more transparent and open in one's interactions with others. This in turn brings self-confidence and trust in one's relationships, and that trust brings genuine friendships. Since we are social beings, it is no surprise that the presence of genuine relationships is correlated with more happiness, flourishing and well-being (Cacioppo & Hawkley, 2009; Keyes 2005, 2007). Moreover, if one has peace of mind and compassion, then even serious problems may not appear overwhelming; thus, such qualities may be key components of resilience, which is in turn intimately related with well-being.

On the other hand, if one is overly self-centered, then one engages in actions that promote one's own interests even when they harm the interests of others. This results in feelings of guilt and worthlessness, as well as a need to hide one's actions from others, which prevents transparency and openness in one's relationships. Since one takes advantage of others, one naturally suffers from a consequent lack of trust in others. This distrust of others, fear of being taken advantage of, fear of one's actions being revealed, and fear of rejection based on one's harmful actions leads to a deep-seated sense of insecurity, which in turn results in loneliness and hopelessness. In the end, this is none other than a state of languishing, the opposite of flourishing, well-being, and positive mental health. These connections drawn out by the Dalai Lama have gained support not only from basic science, as mentioned above, but also from clinical practice (Gilbert, 2005). In line with this scientific and clinical work, the Dalai Lama goes so far as to say that because we are social beings, a self-centered attitude goes against human nature. This revised view of human nature, with social connection and compassion at its heart, is a refreshing approach to human relations and ethics that could have a profound impact on our societies if taken to heart.

How to Cultivate Compassion

If we accept the mounting evidence in psychology, sociology and the health sciences that positive emotions and values like empathy and compassion show psychological, physiological and social benefits, and if we accept that we have an innate capacity for compassion, then the next important question is whether compassion can be cultivated, and if so, how. Religious traditions appear unified in their suggestion that compassion can indeed be cultivated if actively pursued in the proper way. In a commentary on Geshe Chekawa's "sevenpoint mind training" instructions, the Buddhist teacher Se Chilbu writes (Jinpa, 2006, p.94):

Seated on a comfortable cushion, visualize your dear mother vividly in front. First, to cultivate loving-kindness and compassion, reflect in the following manner:

"Because she, my dear mother, first gave me this human existence of leisure and opportunity, which she nurtured without any negligence, I have encountered the Buddha's teachings. Because of this [today] it is possible to grab happiness by its very snout. She has thus helped me. Throughout all stages, when I was in her womb and after birth, she nurtured me with impossible acts of kindness. Not only that, since samsara's beginningless time, she has constantly watched me with eyes of love, perpetually helped me with affection, and repeatedly protected me from harm and misfortune. She has given me so much benefit and happiness and has thus embodied true kindness."

Reflect thus and cultivate a depth of emotion such that tears fall from your eyes and the hairs of your pores stand on end.

There is also a small but growing body of evidence from modern science suggesting that compassion can be enhanced through training, although much more work needs to be done in this area (Lutz et al. 2004, 2007; Neff et al., 2005, 2007, 2011a, 2011b; Pace et al., 2008, 2009). The claim that compassion can be cultivated is furthermore supported by the notion of neuroplasticity, the relatively recent discovery that the structure and function of our brains can be altered throughout adult life through sustained practice. Whereas it may be difficult for animals to cultivate compassion to a high degree, humans have the distinct advantage of having sophisticated cognitive capacities for reasoning and analytical thought, and these capacities can be called upon to enhance our compassion beyond the limited biological compassion that is restricted to persons tied to us by family, ethnicity, religion, and other "in-group" markers, to a larger net encompassing broader and broader sections of humanity, and even animals and the larger environment.

There are doubtless many methods one could employ to enhance compassion beyond the biological level to an impartial altruism, and in fact all religious traditions contain methods for such cultivation. For general purpose applications, however, it is important that the method not be religious in nature, and in fact it need not be. In our studies, we use a protocol for the cultivation of compassion developed by Geshe Lobsang Tenzin Negi, drawn from the *lojong* (Tibetan *blo-sbyong*) tradition of Tibetan Buddhism but rendered into secular form for use by individuals of any, or no, religious inclination. The term *lojong* means "mind training" or "thought transformation" and refers to a practice of gradually training the mind in compassion until altruism becomes spontaneous. This process involves meditation, but whereas meditation on a topic, such as impermanence, takes that topic as a content or object of contemplation, compassion meditation does not take compassion as its object, but rather aims at transforming the mind into a state of compassion: a compassionate mind (H.H. the Dalai Lama, Teaching on Kamalashila's *Stages of Meditation*, Washington DC, July 9, 2011).

The first term lo or "mind" here refers to the complete dimension of an individual's subjectivity, whereas the second term *jong* refers to a complete transformation or reorientation; thus the term *lojong* can be understood as the "transformation of subjectivity," the goal of which is a complete reorientation of the person away from self-centeredness or "self-cherishing" (*bdag gces*) towards altruism or "other-cherishing" (*gzhan gces*), similar to the Christian term *metanoia*.

Note 2. Although the Greek term μετάνοια is typically translated as "repentance," its etymology literally means to change or transform one's mind, and it can therefore be better understood as a fundamental transformation of one's view of the world and oneself beyond current limitations and thought patterns towards a love of others. Understood this way, *metanoia* comes very close to *lojong* in meaning. For more on the "transformation of subjectivity," see Ozawa-de Silva and Dodson-Lavelle (2011).

It is important to note that although individual contemplative practices arise within specific cultural and religious contexts and belief systems, that does not mean that they cannot be adapted and applied outside their original context while still retaining degrees of effectiveness in producing transformations of subjectivity, perhaps because they rely upon cross-culturally applicable embodied cognitive techniques that neither depend upon nor require adherence to metaphysical and philosophical tenets (Gyatso 2001, 2005; Ozawa-de Silva & Ozawa-de Silva, 2010; Varela, Thompson & Rosch 1992; Wallace 2006). Moreover, such practices may retain their efficacy because they address suffering not primarily on a (narrowly conceived) medical model of specific pains, illnesses, and disorders, but rather on an existential level (Ozawa-de Silva & Ozawa-de Silva 2010).

According to the *lojong* tradition, although no one wants difficulties, we still encounter difficulties because of not seeing reality as it is (Gyatso, 2000; Jinpa, 2006). As a result we react to certain perceptions of reality with afflictive emotions such as anger. If we take the time to reassess the situation or person to whom we are feeling anger, and view it or them from another angle, we see that there are also positive dimensions there and our perspective becomes less limited and one-sided. Our anger then naturally diminishes and our mind becomes more peaceful. The key then is being able to investigate reality objectively. Furthermore, *lojong* holds that certain mental states are incompatible and in fact opposites. Just as increasing the heat in a room naturally reduces the coldness there, or increasing the light decreases the darkness, so does a reduction in anger or hatred create space for compassion, whereas an increase in compassion reduces anger and hatred. Anger and hatred are the motivating factors in violence; nonviolence, it has been pointed out, is not merely the absence of violence, but the manifestation of compassion (Gyatso, 2001; Rosenberg, 2004).

The *lojong* tradition holds that since compassion is the wish to relieve another of suffering, it depends on several things, most importantly (a) perceiving the suffering of another; (b) having a sense of affection or closeness for that person; (c) and recognizing that the suffering can, in fact, be alleviated. If one perceives another suffering, but has no sense of affection for that person, one will either feel indifference to their suffering or one may even take pleasure in their suffering (if, for example, they are viewed as an enemy). On the other hand, when one perceives suffering in a loved one, compassion arises naturally and spontaneously. Just as a lack of affection precludes compassion, so can a lack of insight into suffering. If one has great affection for someone, but one does not realize that they are suffering, one will not feel compassion for them. An example would be having great affection towards a friend who is addicted to cigarettes, but not knowing that nicotine addiction is very harmful to one's health. Lastly, for compassion to be sustainable, one must also have a recognition that the suffering can in fact be eliminated if its underlying causes are removed. If one does not have this recognition, then even if one feels affection towards someone and recognizes their suffering, one's compassion will eventually result in "burn-out" because there it will be replaced with a sense of hopelessness.

Similarly, despite some variation in the emerging literature on compassion, there seems to be broad agreement among scientists that the definition of compassion involves at least the following aspects: a cognitive aspect (recognizing suffering in oneself or another), an affective aspect (a sense of concern or affection for the other), an aspirational or motivational aspect (one wishes to relieve the suffering of the other), an attentional aspect (one's degree of immersion and focus), and a behavioral aspect (a compassionate response; an action that stems from compassion) (Ekman, 2008; Gilbert, 2005; Lutz et al., 2004; Lutz et al., 2008; Neff, 2011a).

Strictly speaking, it seems that the first two are the actual key required ingredients or preconditions for compassion: one must both see suffering in another and have a sense of concern for that other. If both are present, the generation of compassion is a natural result. If either is lacking, compassion is impossible. The fourth (behavior) is therefore actually the result of compassion, namely a compassionate response or an action taken on the basis of having felt compassion. Since this exists in a cause-and-effect relation to compassion, compassionate behavior is not strictly compassion itself; nevertheless such behavior may provide a feedback-effect strengthening or engraining compassion, so it may be an effect that can also become a cause for further compassion. The third, namely the aspirational/ motivational aspect, is the actual compassion itself: the wish to relieve the other of suffering. This can range from a weak wish on a highly conceptual level to a powerfully emotional, fully-embodied state. It can also be biased and restricted (biological compassion; biased compassion; limited compassion) or unbiased and universal. Lastly, in addition to the cognitive, affective, motivational/aspirational, and behavioral dimensions, there may be an "attentional" dimension: how focused and stable is one's compassion, or is it merely a fleeting

state of mind, quickly crowded out by one's own emotional distress or various distractions? Additionally, the stronger and more encompassing the affective aspect and the more profound and penetrating the cognitive aspect (suffering can be realized on multiple levels, and goes beyond mere immediate physical and mental pain), the stronger the aspirational and motivational dimension (compassion per se) will be. In other words, genuine full-fledged compassion would contain all five of these dimensions to a high degree.

Affective: How strong is the sense of endearment and affection towards the other? How contrived or conceptual is the state of compassion vs. how fully and physiologically embodied and non-conceptual is it? Is it spontaneous? Is the sense of affection based on bias and partial (friend vs. foe; reciprocal or kin altruism) or is it universal?

Cognitive: How profound is the cognitive basis for compassion? What levels of suffering are being perceived? Is it merely immediate physical or mental pain, or does it encompass the causes of that pain, which may extend to deeper structural conditions? Is there a sense of hope based on the recognition that suffering can be ended once its causes are eliminated?

Attentional: How sustained and long-lasting is the compassionate state? Is it a fleeting moment, a sustained affective-cognitive state, or a long-term disposition that actually comes to pervade one's daily life?

Motivational: Is the compassion merely a wish, a deeply felt aspiration, or even stronger, a fully-engaged and determined motivation to relieve others of suffering? To what extent does the motivation extend to a willingness to sacrifice one's own well-being in order to relieve the suffering of the other?

Behavioral: To what extent is it accompanied, followed on by, or reinforced by other behaviors, such as compassionate physical action, compassionate speech or compassionate thoughts (wishes, prayers, aspirations, plans)?

The key to *lojong* practice is therefore cultivating an analytical awareness that counteracts the limited and biased perspectives that result in self-centeredness and deepening that awareness until it becomes a deep-seated altruism that responds spontaneously to the needs of others. To move from a position of self-centeredness to compassion is neither easy nor quick, however. Therefore, a systematic approach is taken that begins from where the practitioner is, and leads him or her step-by-step to the final goal of altruistic, unbiased compassion.

The following outline presents some of the key points taught in CBCT in a sequential and logical order:

 experiences of suffering and happiness do not merely depend on external stimuli but on internal mental states (which cause immediate experiences of well-being or suffering when they arise, and which also propel concordant actions that are helpful or harmful to oneself and others, leading to future happiness or suffering);

- (2) increased freedom from destructive emotions therefore results in increased happiness and less suffering, both in the short-term (due to not experiencing the destructive emotions) and in the long-term (due to not experiencing the results of harmful actions taken when under the power of destructive emotions);
- (3) emotions and other mental states are not permanent but change momentarily and can be transformed with practice;
- (4) a strong determination to free oneself from negative emotions helps one to achieve this (self-compassion);
- (5) in wanting happiness and to be free from suffering, we and all other beings are alike; there is no difference between us;
- (6) we depend on others for everything we enjoy and exist in a web of interdependence with others and the world;
- (7) recognizing our sameness with others (5) and how we benefit from them (6) decreases the illusion of distance we feel and leads to a sense of impartiality, gratitude, and affection;
- (8) partiality and bias do not only harm those we regard as enemies, but even those we regard as loved ones, since bias is ultimately unjustified and distorts our interaction with others;
- (9) when we combine insight into suffering (1–2) with closeness and affection to others (7–8) we recognize that others are suffering and naturally wish for them to be happy, which is "wishing compassion," namely the thought, "How wonderful it would be if they were free from suffering."
- (10) when this thought of wishing compassion is strengthened it leads to "aspiring compassion," namely the deeply felt aspirational prayer "May they be free from suffering."
- (11) when aspiring compassion is supplemented by taking responsibility for others, and becomes active, it becomes engaged compassion, namely the heartfelt intention "I will do whatever I can to alleviate their suffering."

The process employed in CBCT calls upon and combines two styles of practice taught in *lojong*. The first is the "seven-limb cause and effect" method, which involves principally generating a strong sense of gratitude towards one's mother or another loved one by reflecting upon their kindness (as in the quote by Se Chilbu provided above at the beginning of this section), cultivating that into love and compassion, and then gradually extending that love and compassion towards others. The second is the method of "equalizing and exchanging oneself and others." This involves "equalizing" oneself and others by reflecting on how we are all fundamentally the same in wishing for happiness and wishing to be free from suffering; and how oneself and others are equal in deserving happiness and to be free from suffering. One further reflects on the disadvantages of an excessive self-centered view and the benefits of a view that recognizes interdependence and our need for others and then "exchanges" one's self-cherishing for other-cherishing (see steps 5–8 above). Whereas the

"seven-limb cause and effect" method seems to employ the biological basis of kin altruism to create a platform upon which to cultivate boundless compassion, the "equalizing and exchanging self and other" method seems to employ reciprocal altruism as a basis. Since one method may be more effective for some people than the other, both styles are combined in CBCT. In the end, however, both techniques (and CBCT) intend a universal, unbiased compassion that is not limited to kin or reciprocity.

Furthermore, the fact that each of these stages build on the previous insights in a logical and stepwise fashion has led some of our research team to postulate that CBCT, and the *lojong* tradition that it draws from, employs what we call "embodied cognitive logics." Elsewhere, we have written that "the idea of embodied cognitive logics rests upon the notion that, just as human beings share physical commonalities, we also share mental or psychological commonalities regarding the way we process meaning, affect, and ethical decision making, many of which are rooted in our very embodiment. Furthermore, these commonalities represent an embodied cognitive-affective-moral calculus—that is, a complex and dynamic network of causal relationships that map out the ways a particular embodied cognitive-affective state, once generated, influences other states by inhibiting or promoting them." (Ozawa-de Silva & Dodson-Lavelle, 2011, p. 17–18).

Ongoing Research

The CBCT program explained above is currently being used in a number of research studies in a 6 or 8-week form. The protocol was first employed among a population of undergraduates at Emory University beginning in 2005 to evaluate whether compassion training could be employed as a method to address growing rates of depression in college undergraduates. The results of that study have been published in Pace et al. (2008) and Pace et al. (2009), showing that the practice of compassion meditation reduced neuroendocrine, inflammatory and behavioral responses to psychosocial stress that have been previously linked to the development of mental and physical disease. These encouraging results prompted members of our research team to explore the possibility of employing compassion training as an intervention among younger and older populations.

An NIH grant is funding a five-year Compassion and Attention Longitudinal Meditation (CALM) study, now nearing completion, which is evaluating the CBCT program in an adult population alongside two matched active controls: a second meditation intervention that focuses on attentional training (and not compassion) and a health discussion group. The adult CBCT program is an 8-week intervention that meets for two hours a week. Each session contains pedagogical material presented by the instructors, a guided meditation of around twenty to thirty minutes, and group discussion, with subjects being asked to meditate daily for the duration of the program using guided meditation recordings. The two active control groups follow a similar model, but without compassionrelated pedagogy and meditation for the focused attention-only meditation group, and without any form of meditation for the health discussion group.

The CBCT protocol was also piloted in 2008 among adolescents in foster care (ages 13–16) and in 2009 among elementary school children (ages 5–8) in the Atlanta area. These programs followed the same conceptual sequence as the adult program, but with

age-appropriate modifications. In both cases, CBCT teachers from our team went to the children's foster home or school class. For the younger children, classes met twice per week for twenty-five to thirty minutes per session during the normal school day. Classes began with a short meditation practice and a brief overview or introduction to the week's topic, followed by an activity, story, or game to facilitate learning and student engagement. Once we had found an age-appropriate way to convey the topics of the CBCT protocol through such stories and games, we were encouraged to find that even the young elementary-school children were able to grasp the essential concepts involved in the protocol. The methods employed and the results of these pilot programs are described in Ozawa-de Silva and Dodson-Lavelle (2011).

The success of these adaptations has led to on-going studies investigating the effects of compassion training in these populations. In 2010 the Georgia Department of Health and Human Services and the Center for Disease Control in Atlanta, GA funded a randomized, wait-list control trial of CBCT for seventy-two foster children, entitled "A Study of Cognitively-Based Compassion Training (CBCT) to Enhance Health and Well-Being in Adolescents in Foster Care in Metropolitan Atlanta." The study, the results of which have not yet been published, examined the efficacy of this training for reducing emotional reactivity, psycho-social stress, and behavioral problems. Dependent upon the results of the study, the aim is to extend this service throughout the foster care system and to offer similar training programs to foster families, caseworkers, and administrators. On the basis of the pilot program for young elementary school children, our team received a grant from Emory University to run a study using an eight-week long intervention in the 2011–2012 school year at a local school in Atlanta, GA to evaluate the effects of CBCT on prosocial behavior, bullying, social exclusion, stereotypying and bias in collaboration with Dr. Philippe Rochat and Erin Robbins, both of Emory University.

In May 2010 researchers from Emory University and the U.S. Centers for Disease Control and Prevention (CDC) field-tested CBCT in Kosovo to investigate its potential to heal the trauma of war. Based on the success of this trial, a more extensive project is planned for 2012, pending funding, to evaluate CBCT's effects in the treatment of stress and trauma as well as its potential to foster the cultivation of new modes of thinking and behavior that will foster reconciliation and nation-building, thereby reducing the potential for future conflict. The research team includes representatives of Emory, the CDC, the Antares Foundation, and the Kosovo Rehabilitation Centre for Torture. Members of our broader research team at Emory University, including Dr. Nadine Kaslow and Dr. Barbara Patterson, are also investigating the efficacy of CBCT among suicide-attempters at a local hospital in Atlanta and among trauma survivors in Kosovo, and have also begun to explore its application in early-onset Alzheimer's patients and in a prison population.

Note 3. Updates on these projects and links to future publications will be made available at the Emory-Tibet Partnership website (www.tibet.emory.edu) and the website for the Emory Collaborative on Contemplative Studies (www.emory. edu/ECCS/). Additionally, full video footage of presentations on this work at the conference "Compassion Meditation: Mapping Current Research and Charting Future Directions" at Emory University in 2010 with the participation of H.H. the Dalai Lama is available at: www.emory.edu/home/academics/dalailama/visit.html.

Conclusion: The Need for Secular Ethics

Ethical values are indispensable for human happiness and well-being on both an individual and collective level, and this is becoming even clearer as our world becomes smaller and our communities become more diverse. Whereas in the past religion and families played a central role in instilling ethical values in new generations, modern pluralistic and multicultural societies must adapt to the times and find ways to instill ethical values in coming generations in ways that are not partial to one religious tradition over another, or over those who follow no religious tradition. The question of ethics will always be central to religious traditions. In the public square, however, the question of ethics must be separated from the question of religious adherence. New times call for new thinking: if we remain unable to formulate a robust secular ethics, our future well-being, and the well-being of our planet as a whole, may be in grave danger.

Compassion appears to be the most stable foundation for a secular ethics that transcends religious, cultural, and philosophical divides, because it is based on the fundamental human aspirations to have happiness and avoid suffering, because it is rooted in our human nature and our evolutionary heritage, and because it is something that we have the capacity to cultivate individually and socially as human beings endowed with intelligence and reason. Moreover, there is increasing scientific evidence in the fields of medicine, psychology and neuroscience that compassion is not only beneficial for others, but also for oneself. Although this article focuses on one method for cultivating compassion drawn from the Tibetan Buddhist *lojong* tradition, we feel strongly that all religious traditions (and several secular ones) contain methods for the cultivation of compassion, and may serve as sources for the development of secular programs such as the one presented here. Further interreligious dialogue on this issue could prove very fruitful. Much more work in general remains to be done in the area of compassion research, and we hope that this growing subfield attracts more interest given its tremendous potential. Furthermore, since compassion, suffering and well-being pertain to all aspects of our lives, we hope this research will be both truly interdisciplinary in nature and socially engaged.

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