Distribution Agreement

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature:

Brendan Ozawa-de Silva

Date

Becoming the Wish-Fulfilling Tree: Compassion and the Transformation of Ethical Subjectivity in the Lojong Tradition of Tibetan Buddhism

Ph.D.

Graduate Division of Religion West and South Asian Religions

> John Dunne, Ph.D. Advisor

Sara McClintock, Ph.D. Committee Member

Lawrence Barsalou, Ph.D. Committee Member

Lobsang Tenzin Negi, Ph.D. Committee Member

Accepted:

Lisa A. Tedesco, Ph.D. Dean of the James T. Laney School of Graduate Studies

Date

Becoming the Wish-Fulfilling Tree:

Compassion and the Transformation of Ethical Subjectivity

in the Lojong Tradition of Tibetan Buddhism

By

Brendan Richard Ozawa-de Silva D.Phil., Oxford University, 2003

Advisor: John Dunne, Ph.D.

An abstract of

A dissertation submitted to the Faculty of the

James T. Laney School of Graduate Studies at Emory University

in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

in West and South Asian Religions

2015

ABSTRACT

Becoming the Wish-Fulfilling Tree:

Compassion and the Transformation of Ethical Subjectivity

in the Lojong Tradition of Tibetan Buddhism

By

Brendan Richard Ozawa-de Silva

This dissertation explores the possibility of viewing ourselves as beings who have "compassion at the core" in order to make a contribution to the emerging fields of contemplative science, positive psychology and the interdisciplinary "science of compassion." It does so by drawing from Tibetan and Sanskrit texts from the Buddhist Lojong (blo sbyong) tradition, as well as contemporary research in psychology, neuroscience, phenomenology and anthropology that focuses on compassion, emotions, empathy, embodiment, and meaning in life. Much of this research involves a reorientation away from an individualistic account of selfhood towards a recognition of the deeply social and moral nature of experience itself and the implications this has for our understanding of human nature, compassion, and ethics. Particular attention is paid to sources and concepts employed by contemporary, secular compassion training protocols such as Cognitively-Based Compassion Training (CBCT). After exploring key questions in contemplative science, such as reductionism, religious experience and the role of ethics and metaphysics, the dissertation turns to the specific types and ingredients of compassion as understood in the *Lojong* tradition. It then elucidates an implicit "contemplative phenomenology" in the Lojong tradition and compares it to strains of western phenomenology, suggesting that the development of a theoretically robust contemplative phenomenology will be very helpful to the future project of neurohpenomenology in contemplative science. The final chapter explores grounded and embodied cognition as well as psychological research on emotions and the implications these research areas have for contemplative science. The conclusion revisits the implications for our understanding of compassion and ethics when experience is seen as fundamentally interpersonal and moral. This perspective is then applied to the specific topic of "meaning in life" as studied in positive psychology with suggestions for developing a "relational theory of meaning" that centralizes the interpersonal and the ethical dimensions of meaning.

Becoming the Wish-Fulfilling Tree:

Compassion and the Transformation of Ethical Subjectivity in the Lojong Tradition of Tibetan Buddhism

By

Brendan Richard Ozawa-de Silva D.Phil., Oxford University, 2003

Advisor: John Dunne, Ph.D.

A dissertation submitted to the Faculty of the

James T. Laney School of Graduate Studies at Emory University

in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

in West and South Asian Religions

2015

ACKNOWLEDGMENTS

I would like to express my deepest gratitude to my committee members, each of whom played a pivotal role in my education and career development. The suggestion to return to graduate school to pursue a PhD in the area of psychology and contemplative practice initially came in 2006 from Geshe Lobsang Tenzin, who correctly foresaw that this area would see tremendous growth in the coming years. Dr. John Dunne readily supported the idea from the very beginning and offered to serve as my advisor, guiding me through every step of the application process, my coursework, my dissertation and so much more. Dr. Sara McClintock taught me enormously in my coursework, guided me carefully through my exams, and bestowed the great kindness of teaching me Tibetan. Dr. Larry Barsalou taught me in several graduate courses on psychology, and a great deal of what I know in this discipline comes from him; he also kindly invited me to participate in my first meditation research study, opening my eyes to this fascinating field. The influence of each of these individuals is evident on every page of this dissertation, and in all the teaching and research I am engaged in today. I cannot thank them enough.

During my coursework, research, and writing, several others also instructed and benefited me greatly. I would like to thank especially Nadine Berardi, who taught me the little I know of Sanskrit, and all my other many instructors. I would also like to thank my fellow students in the Graduate Division of Religion and in Psychology, chief among them Brooke Lavelle Heineberg, my partner in crime in my endeavors both inside and out of the classroom. I also thank and greatly appreciate Dr. Liz Bounds, who first brought me to Emory University as a postdoctoral fellow in 2003, and who has watched my development, perhaps with bemusement, every step of the way. Ten years after that, Dr. Peggy Samples, my chair at Life University, played a very similar role in bringing me to my new institutional home, and her support has been crucial in enabling me to finish this dissertation two and a half years after taking up a full-time position there.

A great deal of the limited understanding I have of the *Lojong* tradition comes also from those who have taught me in more traditional Buddhist contexts. These teachers include H.H. the Dalai Lama, H.E. Ganden Tri Rizong Rinpoche, the late estimable H.E. Denma Locho Rinpoche, Ven. Lhading Rinpoche, and of course Geshe Lobsang Tenzin himself, in addition to numerous others. I am greatly in their debt on numerous accounts. I also thank those who practice *Lojong* in its "secularized" form of Cognitively-Based Compassion Training: both my fellow instructors and all the students who have come through these programs, as well as the numerous friends who have supported this teaching and research along the way. They have all certainly enhanced my understanding of *Lojong* and compassion as well.

Last but not least, I am greatly appreciative of the support of my parents and my always understanding and supportive wife, Chikako. They are the foundation upon which anything I may achieve can be built.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION	1
Compassion at the Core	1
Compassion and Modern Science	8
Aims, Questions and Chapter Overview	13
Lojong and the Use of Lojong Source Texts	24
Positive Psychology: Origins and Opportunities for Growth	30
CHAPTER TWO: TOWARD A CONTEMPLATIVE SCIENCE	48
Wallace: Replacing Science	50
Slingerland: Replacing the Humanities	58
Proudfoot: Reductionism and Experience	67
Secular Ethics	84
Contemporary and Traditional Accounts of Mindfulness	91
Analyzing the Contents of Mindfulness	102
Mindfulness and Compassion in Analytical Meditation Practices	105
Conclusion	110
CHAPTER THREE: TYPES AND COMPONENTS OF COMPASSION IN THE	
LOJONG TRADITION	112
Three Types and Degrees of Compassion in Lojong	113
Immeasurable Compassion	117
Comparisons with the <i>mettā sutta</i>	123
Objects of Compassion and Objectless Compassion	130
The Relationship Between Renunciation (nges 'byung) and Compassion	136

Generating Renunciation through the Four Thoughts as Preliminaries to Great	
Compassion	140
Conclusion	151
CHAPTER FOUR: LOJONG AND CONTEMPLATIVE PHENOMENOLOGY	154
Discovering a Contemplative Phenomenology in the Lojong Tradition	158
Empathy and Interpretation in Phenomenology	172
The Feeling of Being "Real"	186
On Sharing and Not Sharing a World	189
Conclusion	196
CHAPTER FIVE: LOJONG AND COGNITIVE SCIENCE	199
Cognitive Science of Religion	200
Grounded Theories of Cognition	204
Grounded Cognition and Contemplative Science	209
Metaphor, Liturgy and Ritual	216
Psychological Theories of Emotion and Emotion Regulation	228
Comparing Psychological and Buddhist Models	238
Relevance for the Contemplative Science of Lojong and Compassion	243
Conclusion	252
CONCLUSION	256
Compassion as Ethical Self-Cultivation	258
Compassion at the Core <i>Redux</i> : Towards a Relational Theory of Meaning	262
BIBLIOGRAPHY	273

CHAPTER ONE: INTRODUCTION

Compassion at the Core

The question of what it means to be a human being, vague as that question may seem, has often lurked at the edges or under the surface of many avenues of human inquiry: religion, philosophy, literature, even science. For many, the way to approach this question has been to examine what makes human beings unique—different not only from inanimate life, but also different from other life forms, including animals. Taking that approach leads one in the direction of language, culture, civilization, meaning, morality, consciousness—things that, at one point or another, many have thought unique to ourselves as human beings.¹ If we focus on these dimensions of human life, we also tend to emphasize a particular type of human: one who is "civilized," rational, literate, adult, modern. We may also tend to see ourselves as independent entities who come together only to enhance our experience of life along the lines of Rousseau's "social contract," whereby intelligent, rational individuals collectively decide to form a society in order to reap the benefits that can come from collective life (Rousseau, 2012).

Such an approach can lead to distortions, however, if it forgets that part of what makes us human beings lies also in what we share in common with non-humans, not only in what sets us apart. Moreover, one of the most basic things we share with non-human mammals and birds is our need for maternal care. Far from being something we choose to

¹ Overviews and tracings of such lines of thought can be found in De Waal 2009 and Putz 2009.

enter as adults, sociality is required for our very survival as individuals and as a species: we are born into social relationships from the get-go, and our very physiological and psychological development appears to depend heavily on receiving not only material, but also emotional, nourishment (Meaney, 2001; Preussner et al., 2004; Rochat, 2009a). We are also discovering that several of those traits and abilities we once felt were distinctively human, such a sensitivity to fairness and reciprocity, may in fact be shared by other life forms, even things like moral emotions, and that much of our distinctiveness may lie in differences of degree, rather than kind (Brosnan and De Waal, 2003; De Waal, 2009; Gintis, 2005; Haidt and Graham, 2007).

This dissertation explores the possibility of viewing ourselves as beings who have "compassion at the core." As mammals, we humans enjoy an evolutionary past that has placed social connection and care at the very core of our bodies and minds. Not only is care an absolute requirement for our survival before and immediately after birth, it is also a requirement for our healthy psychological and physiological development. Variations in maternal care can affect gene expression and stress reactivity in offspring, and appears to have long-term effects on how our body responds to psychosocial stress (Meaney, 2001; Preussner et al., 2004). The type of care that comes from our evolutionary heritage is partial, however, and limited by in-group/out-group bias and distinctions that operate in complex ways (Crocker et al., 1987). Although this limitation need not translate into outright hostility or violence towards members of an out-group, such distinctions bias individuals in ways that can prevent an impartial expression of compassion and care towards others (Allport, 1952; Brewer, 1999). Moreover, these limitations appear to be fluid rather than fixed: there is growing reason to believe that as human beings we have

the ability to overcome or at least lessen the effects of bias (Lueke and Gibson, 2014. Martiny-Huenger et al., 2014), which would open the door to cultivating more powerful and encompassing forms of compassion.

Most of the traditions that arose to bring about such transformation throughout human history would be considered religious, but in recent times contemplative practices have been developed for use in non-religious settings. These practices draw from specific religious traditions, but present the cultivation of compassion in a universal way, attempting to remove, to as great extent as possible, language and concepts that would be considered sectarian (CCARE, 2009; Negi, n.d.; Singer and Bolz, 2013). The growing number of such practices, their popularization in society, and their use in research, clinical and outreach settings invites scholarly inquiry. One of the main trajectories of this recent trend involves the secularization and scientific study of practices that emerge from the Lojong (Tib. blo sbyong) tradition of Tibetan Buddhism, which has given rise to the Cognitively-Based Compassion Training (CBCT) program at Emory University (Negi, n.d.), the Compassion Cultivation Training (CCT) program at Stanford University (CCARE, 2009), and other programs. In these programs, compassion is understood as one of the two dimensions of care: the wish to alleviate the suffering of another or others. Following the Buddhist tradition, these programs use the term "love" for the second dimension of care, the wish for the other to have happiness (CCARE, 2009; Negi, n.d.).

This dissertation concentrates on the compassion training aspect of the *Lojong* tradition and in particular on the texts and practices within that diverse tradition that are drawn upon for programs like CBCT and CCT. In the work, I take an interdisciplinary approach. I employ a religious studies approach with close attention to the original texts

both in their original languages and in translation, but because my interests are not merely historical or textual, I also draw heavily on recent work in psychology, neuroscience, cognitive science, anthropology, and phenomenology. Although this is a broad approach, it is also a necessary one, because the cultivation of compassion cannot be restricted to a single domain or discipline, be it religion, psychology, neuroscience or philosophy. As will be argued here, the cultivation of compassion gradually reconstitutes the entire subjectivity of the practitioner, turning him or her not into something other than a human being, but certainly into a very different kind of human being from where he or she began. Moreover, work in the fields of positive psychology and contemplative science—and even the new area of the "science of compassion"—is emerging as highly interdisciplinary.

Early on, my approach was to ask what the Buddhist *Lojong* tradition might have to offer to modern academic thought on our understanding of compassion and other positive emotions, and what in turn these modern academic disciplines might have to offer the Buddhist tradition. I now see this model of one tradition "teaching" another as rather simplistic. Each of these traditions has its own history, language(s), trajectories, and conceptual frameworks. Knowledge is not merely something to be delivered from one side to another, because that knowledge is embedded in a completely different context, and even when one tries to simply bring knowledge directly over and apply it in a separate discipline (and some have tried, as we shall see) what results is not a simple translation or transplantation, but the creation of something new and altogether different. Instead, I now see the endeavor as akin to a dialogue between two (or more) knowledgeable conversation partners. Each, through a conversation with the other, invites the other to re-examine assumptions, consider new possible ways of thinking, attend to new avenues of inquiry, or adopt a new perspective to see where it may lead. Through this process, all sides can learn and benefit. They are not learning because one side is "teaching" the other. Rather, they are learning because the conversation is inviting them to think more deeply from within their own tradition, without abandoning it altogether in favor of another. Another reason why the "teaching" model is not helpful is that in many important areas of inquiry we have no consensus even *within* traditions or disciplines (what is mind? what is an emotion? what is culture? what is enlightenment? what is the most effective way to cultivate mindfulness, or compassion?). Insisting upon a teaching model can often lead to forcing a tradition to speak univocally when it actually does not (Dunne, 2015). A dialogue model recognizes that we all—traditional Buddhist scholars and scholars in modern academic disciplines alike—have much to learn, perhaps more than we have to teach.

The dialogue that ensues is not one that leads to no conclusions, however. In the present work, several concrete arguments will be put forth. The broadest of these is that interdisciplinary research suggests the possibility of adopting a view on human nature that places compassion at the core, that is, as a central aspect of what it means to be a human being, in terms of our consciousness, our subjectivity, our happiness, and our sense of ethics and morality. For much of the history of western thought, compassion (and related constructs, such as empathy, care, and so on) has not been seen as a central concern for understanding human life or the human condition. There are comparatively few western philosophers who have concentrated on the issue of compassion (with notable exceptions, whom I consider), and the modern western disciplines of psychology,

sociology, philosophy, anthropology, medicine, and neuroscience have, until very recently, left compassion largely out of the picture. When it has been included, it has typically been treated as a peripheral aspect of human experience. In contrast, compassion is an important, if not central, concern for all Buddhist traditions, although it is handled and understood differently across individual traditions. The *Lojong* tradition in particular is a tradition that arose specifically around the cultivation of a specific type of compassion.

Reading *Lojong* alongside recent work in modern disciplines leads to a number of insights that I try to draw out throughout the dissertation. One of the key insights comes from the fact that such an approach allows us to think more concretely about compassion not merely as an object of inquiry, but also as a starting point for our inquiry. In this, I find resonances with the *Lojong* tradition in the work of the philosopher Emmanuel Levinas (Edelglass, 2004; Levinas, 1979; Levinas and Nemo, 1985), the developmental psychologist Philippe Rochat (Rochat, 2009a, 2009b), the neurologist Antonio Damasio (1999), and the primatologist Frans de Waal (2009). Taken together, the work of these individuals counteracts what I see as a ratiocentric, ethnocentric, adult-centric, anthropocentric approach to understanding the human experience. What can replace it is an approach to the study of the human condition that takes seriously the evolutionary and developmental trajectories of human beings: looking at what we have in common with non-human animals, and not just what sets us apart. When we do so, what emerges is a view of humanity in which compassion is not merely a luxury, but a core component of our survival, our psychological and physical development, and our ability to flourish, be healthy, and have meaning in life.

Several smaller arguments are made along the way as well. I argue that the Lojong tradition and the contemporary practices that draw from it invite us to rethink "mindfulness" and expand our view of contemplative practices and the scope of contemplative science to include normative and analytical practices. I point out several ways later in this chapter how an attention to contemplative practices and the scientific study of contemplative practices can contribute to the field of positive psychology. One such contribution lies in working towards what I call a "relational theory of meaning" to complement, if not supplant, approaches to the study of meaning in life in psychology that depend on goal achievement and sense-making and that are therefore applicable only to normal-functioning adults (Steger et al., 2006; Steger et al., 2008). I also develop the idea of "embodied cognitive logics" to explain how compassion training takes place in *Lojong* and its modern-day variants like CBCT; this model, however, can be used to understand religious practice and ritual writ large. I also illustrate how the Lojong tradition includes what can be considered a contemplative phenomenology that can contribute to contemporary interest in neurophenomenology.

Although each of these points will be drawn out in the dissertation, a considerable amount of the dissertation also involves simply mapping out the terrain of *Lojong*, contemplative science and modern psychology (especially positive psychology). This is because the field of contemplative science is still very new and its highly interdisciplinary nature makes it a very challenging area to study. A further contribution of this dissertation, therefore, is to show how work can be done in this new field of study in a way that draws from scientific research, theoretical and conceptual comparison of

7

models, and primary source material from a specific contemplative tradition. At present, surprisingly few works in contemplative science attempt to cover all these bases.

Compassion and Modern Science

Despite being one of the central components of the Buddhist tradition, compassion is a topic largely neglected by modern Buddhist studies scholarship. With a few notable exceptions, hardly any scholarly monographs or even article-length works take on compassion or compassion-related topics as their main focus. There are several reasons, however, why further in-depth studies of compassion within the Buddhist tradition could be very beneficial. Recent years have seen a quickly growing interest in the study of contemplative practices, including the study of such practices within neuroscience (Fox et al., 2014; Klimecki et al., 2012; Lutz et al., 2008), psychology (Galante et al., 2014; Goyal, 2014), and the health sciences (Kok et al., 2013; Pace et al., 2008, 2010, 2013). This has resulted in recent developments such as a special issue of the Annals of the New York Academy of Sciences in 2014 dedicated to "Advances in meditation research: neuroscience and clinical applications" (Sequeira, 2014) and several new journals over the past six years including *Mindfulness*, the Journal of Compassionate Healthcare and the Journal of Contemplative Inquiry. Although much of this work has dealt primarily with "mindfulness" practices, recently increasing attention is being paid to styles of meditation that aim explicitly at the cultivation of compassion.

Clearly the importance of compassion within the Buddhist tradition, and its central importance within some traditions, such as Tibetan Buddhism, means that a thorough study of compassion as understood within particular Buddhist contexts would constitute a contribution to Buddhist studies scholarship. In other contemporary scientific and humanities disciplines beyond Buddhist scholarship, however, the study of compassion can also be seen as important for numerous reasons. Firstly, there is a small but growing body of evidence supporting the view that compassion is of great importance for our physical and psychological health and well-being on an individual level. Secondly, compassion may be of even greater importance with regard to how we relate to one another on a social level, since compassion and its cultivation have ethical and social dimensions that may be just as, if not more, important as the dimension of individual health and well-being. Thus, the study of compassion as a social and moral emotion may help us to better understand the interconnected nature of individual and social well-being.

This raises the question, however, of the relationship between "compassion" as an object understood within the Buddhist context (and indeed within the plurality of Buddhist traditions and contexts, each of which may contain slightly different understandings of compassion) and "compassion" as an object of contemporary scientific interest. A significant portion of the contemporary scientific interest in compassion (such as that represented by the labs of Richard Davidson (Lutz et al., 2004, 2008), Tania Singer (Singer and Bolz, 2013; Klimecki et al., 2013), Charles Raison (Pace et al. ,2009, 2010, 2013), Kristin Neff (2005, 2007, 2011), Philippe Goldin (Jazaieri et al, 2013), and others) is in fact located within the context of this emerging dialogue between Buddhist, and predominantly Tibetan Buddhist, conceptions and practices of compassion and contemporary scientific paradigms and research. The viability of this emerging dialogue between Buddhism and modern science, however, depends in part on having a clear understanding of compassion in all its complexity within the Buddhist traditions, and

again especially Tibetan Buddhism, considering that many of the practices and protocols being studied have emerged from Tibetan Buddhism. This foundational step already requires certain processes of translation—both literal translation of Tibetan texts into English and other languages prominent in the dialog, for example, as well as the translation of concepts from centuries-old texts to modern contexts. Such a first stage would result in a clearer understanding of compassion as it is presented, perhaps in multifaceted ways, in Buddhism. It would serve an important foundational role in then furthering the second stage, the dialog between science and Buddhism on the scientific study of contemplative practices, which would require further efforts in conceptual translation.

The purpose of this dissertation is to make a contribution to this emerging dialogue by studying "compassion" as an object presented in the *Lojong (blo sbyong)* tradition of Tibetan Buddhism, and then by placing this "compassion" alongside the "compassion" that has emerged as an object of scientific inquiry in recent years. The question of whether these two objects of study are the same or different is left open at the beginning of the inquiry; we can take for granted, however, that the contexts in which these two objects are studied and presented are certainly different. This raises the question, naturally, of the extent to which such contexts may shape compassion and conceptions of compassion.

The fact that the present project has two goals—both a study of compassion in the Tibetan Buddhist tradition per se, and laying the foundation for further steps in the dialogue mentioned above—influences some of the decisions made with regard to how the topic of compassion will be studied. The first is the choice of focusing the present

10

study on the *Lojong* tradition and in particular on the seminal work of Je Tsongkhapa, the *Lam rim chen mo* ("Great Treatise on the Stages of the Path to Enlightenment") (Tsongkhapa, 2004). Tsongkhapa's presentation of compassion and how to cultivate it, as presented in this text, has served as the basis for several contemporary compassion meditation protocols being studied today: Cognitively-Based Compassion Training, developed at Emory University by Geshe Lobsang Tenzin (Negi, n.d.); Compassion Cultivation Training, developed at Stanford University by Geshe Thupten Jinpa (CCARE, 2009); and other *Lojong*-based programs (Hurley, n.d.).

Secondly, compassion in contemporary scientific inquiry is typically understood as an emotion or an affective state, but the firm distinction between cognition and emotion, now under fire in the cognitive sciences as well, is largely absent in the Tibetan Buddhist tradition, which has no word equivalent to "emotion." Still, in contemporary psychology "emotion" tends to connote a deeply embodied state that draws upon evolutionarily "older" parts of the brain, such as the limbic system, to process information and prepare the organism for appropriate action (Damasio, 1999; Ekman, 1992; LeDoux, 1998). Despite the fact that it seems increasingly clear that there is no hard and fast line between cognition and emotion (Lane and Nadel, 2000), it may still remain useful to keep in mind the helpful distinction between the deeply embodied and often automatic or spontaneous nature of emotion, and the (although still embodied) higher-processing types of cognition that are more centrally located in the evolutionarily newer parts of the brain, such as the prefrontal cortex. For this reason, one of the chief methodological tools that will be used in examining the topic of compassion in the Tibetan Buddhist tradition is that of reading them through a perspective informed by

work in emotions research and in embodied and grounded cognition. One of the things particularly interesting about the *Lojong* tradition and the contemporary protocols that employ *Lojong* practices in secular contexts, such as CCT and CBCT, is that they employ a technique that includes "analytical meditation" (Tib. *dpyad sgom*) followed by "stabilizing meditation" (Tib. 'jog sgom). "Analytical meditation" will be explored in greater depth in the dissertation, but for now it suffices to say that this is an important characteristic of *Lojong* and *Lojong*-based practices that warrants attention, since it distinguishes these meditation practices from many of the practices currently being investigated in contemplative science.

Just as in the case of compassion itself, work on the body and embodiment in Tibetan Buddhism, despite its obvious importance, has received less attention than it seems to deserve. As will be explained in further detail below, work in embodied cognition may have profound implications for the study not only of the cultivation of compassion, but of religious practices in general. Because embodied cognition provides a way of exploring the interrelationships between the physical states and actions of the body, including sensory perception, and mental structures and processes, it has great potential to open up new and productive avenues of exploration for researchers in the humanities and sciences alike. The present work therefore hopes to make a contribution by attending both to compassion and to the study of the body and embodiment in Tibetan Buddhist practice, particularly as relates to the cultivation of compassion.

Aims, Questions and Chapter Overview

This dissertation seeks to address a number of questions that are central to the task of a proposed "contemplative science." There is no standard, accepted definition of "contemplative science" (Britton et al., 2013; Dunne, forthcoming; Wallace, 2006). Here, I define it as the interdisciplinary study of contemplative practices across traditions with a particular interest towards understanding their underlying features, mechanisms, and effects so that they can be employed in secular or non-traditional settings to benefit individuals and groups. This definition describes both the research taking place today and the broader context orienting that research, namely a context oriented towards the alleviation of human suffering and, in some cases, broad social change. It also serves to differentiate contemplative science from the merely cultural, historical, or textual study of contemplative practices, although such studies would naturally contribute, and indeed be essential to, the broader project of contemplative science.

In the dissertation, I propose that one way of understanding how and why religious contemplative practices can be employed while retaining some of their benefits is that they draw upon structures of grounded cognition that are rooted in the body and mind, and that have an evolutionary basis. This is a standard approach taken in the cognitive science of religion, and one that is occasionally seen as overly reductive (Boyer, 2001; Cho and Squier 2008a, 2008b). An aim of the dissertation is therefore to explore a middle ground that recognizes a common evolutionary basis to shared features of cognition and emotion that we find not only across human beings but even across primates and mammals in general, while retaining a specific role for culture and religion as human products that can result in a profound shaping of that common basis. The dissertation therefore explores work in cognitive and comparative psychology, and neuroscience.

The importance of such a task can be seen in the emerging dialogue between modern scholarship and representatives of traditional Buddhist thought, a dialogue that is often characterized as "science and Buddhism" or "science and spirituality," and that is exemplified by the meetings organized by the Mind and Life Institute between primarily western philosophers, scientists and social scientists, and His Holiness the Dalai Lama. This dialogue is proceeding in many other avenues as well, including the emergence of "neurotheology" and the work of Andrew Newberg (Newberg & d'Aquili, 2002; Newberg, 2010). I have participated in such dialogues myself, and co-designed and cotaught an interdisciplinary graduate seminar entitled "Mind and Brain from the Perspectives of Buddhism and Western Science," cross-listed between psychology and religion. In such dialogues, one clear problem is the use of terms that are understood differently in western thought than in Buddhist thought, such as "consciousness" and "mindfulness." These terms often have a range of meanings, or are single words that are used to denote multiple distinct concepts, that is, they are polysemous.

One would think, therefore, that a concerted effort to define terms in advance would be a characteristic of such dialogues, but in fact very little collaborative effort is typically devoted to this task. Moreover, while definitions would be helpful, simple definitions are probably not enough, because terms like "consciousness" and "mindfulness" do not simply refer to simple, identifiable physical objects that we can point to and agree upon, such as a chair, a table, or a mountain. They actually perform complex roles within entire systems of thought. Although Buddhist texts offer numerous, apparently simple definitions of "consciousness" (Tib. *rnam shes*) or "mind" (Tib. *blo*), coming to understand what consciousness or the mind actually is, beyond merely being able to recite the definition, is actually an ongoing process that is not separate from the lifelong trajectory of one's spiritual development.

Therefore, in addition to definitions, we also need to understand how these terms are used within the thought world of a tradition (to follow Wittgenstein in seeing language as behavior, not merely as signification) and how they relate to other terms in a complex webs of relationships. This in turn requires a close examination of these terms within their respective traditions, and then an attempt to bring that understanding from both sides together. That is what this dissertation aims to do with the term "compassion." It seeks to navigate a middle path between naive universalism and narrow particularism. Naive universalism is what has, in my mind, characterized much of the scientific research on meditation and contemplative practice thus far; it treats complex terms like "mindfulness," "consciousness," "mind," "compassion," "empathy," and "meditation," as if they required nothing more than a single-sentence definition, or no definition at all, even when investigating across traditions, or even across multiple traditions at the same time.² Equally problematic, however, is narrow particularism, characteristic of some research in the humanities and in cultural anthropology, which makes from cultural variability a case for cultural relativism (cf. Spiro, 1986). According to such a view, concepts like "compassion" can only be understood when situated fully within an historical, cultural or religious context (or typically all three) and it is mistaken to think that what was meant by karunā (the Sanskrit word commonly translated as

² For an example of this, see Davis and Hayes (2011).

"compassion") in India two thousand years ago or *snying rje* (the Tibetan term) one thousand years ago bear much resemblance even to each other, much less to our contemporary understanding of the English word "compassion" in the early twenty-first century.

Both extremes prevent real dialogue from taking place, because real dialogue requires recognizing both commonalities and differences across parties, and cannot proceed if one ignores either. Nevertheless, the question of universalism and particularism is a complex and important one and will be examined in chapter two in particular as well as later in the dissertation. This methodological issue is approached from a variety of avenues through an examination of traditional sources, contemporary practices, debates in phenomenology, and contemporary research in religious studies, psychology and neuroscience.

The remainder of this introductory chapter includes a section on what the *Lojong* tradition is and why certain source materials from it were chosen rather than others, followed by two sections that look specifically at contemporary movements that serve as a context and frame for the current examination of compassion in the *Lojong* tradition. These movements, which differ in size and scope, are positive psychology, contemplative science and secular ethics. In these sections, I give an overview of how I understand these movements and how they relate to compassion. I spend less time here focusing on contemplative science itself, because contemplative science is the main topic of chapter two.

Chapter two focuses on a few particularly important issues in the context of contemplative science that will serve to situate the specific discussion of compassion in

traditional Buddhist texts, compassion in contemporary forms of meditation, and compassion as an object of scientific study in psychology and neuroscience. The chapter focuses first on the very question of how to bring together these diverse traditions and disciplines in order to create a meaningful area of study. Although drawing from a wide array of scholars, including those in the cognitive science of religion, I focus on the works of B. Alan Wallace (2006) and Edward Slingerland (2008a, 2008b, 2008c). Both scholars argue in favor of a dialogue between the humanities and sciences around the study of religious and contemplative practices. This dialogue would naturally be the first step in the project of developing contemplative science, so it is undoubtedly of great importance. Questions remain, however, regarding how the dialog should take place and on what terms, because the different traditions and disciplines involved do not always share common perspectives or methodologies. Here, Wallace and Slingerland come to very different conclusions. For Wallace, science should attend closely to the first-person phenomenological reports of contemplative adepts and will be transformed by its encounter with contemplative traditions (particularly Buddhism), because the latter represent a more encompassing and powerful (in explanatory terms) model of reality, mainly because contemplative traditions attend appropriately to consciousness. For Slingerland, precisely the opposite is true: the world is material through and through, leaving no real room for consciousness as anything other than a product or byproduct of matter, and human beings are nothing more than complicated robots; therefore, it is science that provides the proper explanatory models, and religious studies and our understanding of religion will be utterly transformed by their encounter with science. After engaging in a close reading of their approaches, I propose that the different

conclusions Wallace and Slingerland reach are due to different philosophical positions that they hold, and that these philosophical positions—which are closely related to the question of consciousness and dualism—are grounded neither in scientific nor humanities-based research, but in *a priori* assumptions. I contend that the development of contemplative science should not rest on either of the two philosophical positions offered by these scholars, but should rather remain as free of metaphysical assumptions as possible. Although ultimately the nature of consciousness and its relation to matter constitutes a central question for contemplative science, addressing this thorny topic should be the gradual outcome of collaborative, interdisciplinary research, rather than a starting point that would otherwise divide us from the outset.

The second part of chapter two deals with another important question in contemplative science, namely that of religious experience and reductionism. These are questions that invariably surface when speaking about the scientific or social scientific study of religious and contemplative practices. In this section, I look at the work of Wayne Proudfoot (1985) and Anne Taves (2009). Proudfoot offers a solution to the problem of reductionism by proposing a distinction between "description" and "explanation." While an explanation employs reduction, and actually gains its explanatory power through reduction, a description can never be reduced, since to do so irreparably damages it as a legitimate description. This is an interesting proposal, and if adopted could potentially serve as the basis for a kind of harmony in contemplative science. For example, one could imagine traditional religious accounts of practices and descriptively-heavy scholarly accounts (such as ethnographies) being placed on the side of "description," while scientific and social scientific accounts and analyses of practices would be placed on the side of "explanation," with neither side infringing on the other an arrangement of two "non-overlapping magisteria," to use the phrase coined by Stephen Jay Gould (1997). Nevertheless, I ultimately reject this approach. I argue that a hard-and-fast distinction between description and explanation may be convenient heuristically on a superficial level, but is not ultimately tenable as an analytic distinction. The reason for this is that acts of both description and explanation are the results of constructive processes that necessarily involve interpretation. My objections to Proudfoot are grounded in both the results of empirical research and theoretical considerations—the former coming from work in psychology, and the latter coming from Heidegger (2008), Merlau-Ponty (1962, 1964) and Varela (Varela et al., 1991). The theoretical relevance of interpretive phenomenology as it pertains to contemplative science is not fully developed here, however, as it forms a major part of chapter four.

The third and final section of chapter two turns to a further important area for the development of contemplative science, namely the question of "mindfulness." Mindfulness is at present one of the most studied objects in the scientific study of meditation, yet despite its growing popularity in both academic and popular arenas, it remains a problematic and confusing term. A detailed examination of traditional and contemporary accounts and practices of (or related to) "mindfulness" would require at least an entire dissertation by itself, and is well beyond the scope of this present work (but see Dunne, 2015). Yet the present dissertation's investigation of meditative practice for the cultivation of compassion cannot take place without situating it in relation to work on mindfulness and mindfulness-based practices, especially since they have come to influence the popular (and in certain circles, scientific) understanding of meditation so

profoundly. Therefore, in this section I include a brief treatment of traditional and contemporary accounts of mindfulness, noting in particular the points of tension and differences in emphasis. I then argue that traditional accounts of mindfulness may be understood as being broader than contemporary accounts, in that they allow for a broader range of "content" (or objects of focus) and "process" (ways of attending). Contemporary accounts, on the other hand, seem to represent a limited subset of traditional mindfulness practices, since they focus on a narrow set of content (the present moment, the breath, tactile sensations) and process (non-judgmental, non-analytical attention). I therefore propose a way of understanding mindfulness that relates it to working memory and that expands mindfulness to include a much wider range of content and process. One of my arguments here is that a broader definition of mindfulness would serve the development of contemplative science better, by clearing up conceptual confusion and by opening the door to the study of a broader range of practices. I also argue here that mindfulness practice, narrowly conceived, appears deceptively non-normative. In fact, mindfulness practice contains norms and in traditional Buddhist practice is undoubtedly connected with normative concerns. The broader conceptualization of mindfulness that I offer in this chapter allows us to see the role that norms and values play in mindfulness practice more clearly. This is especially important when considering the relationship between mindfulness, contemplative practice in general, and "secular ethics"—a topic that will be addressed later.

Having examined the broader context and important theoretical distinctions in chapter two, the remaining chapters then turn to the specific topic of compassion and its cultivation. Chapter three concentrates on the *Lojong* tradition, exploring how

compassion is understood. The chapter begins by delineating three distinctive types of compassion that one encounters in the Buddhist traditions, and it also explores, albeit briefly, the relationship between depictions in the Pali canon and in the *Lojong* tradition. The point here is to show that there are different types of compassion, even within a single tradition, and the number of types multiplies when we think across traditions (including, for example, the Dzogchen tradition and its approach to compassion). Since the overall aim is to move towards a dialogue with cognitive science and psychology, and to contribute to contemplative science, I do not attempt an exhaustive treatment of compassion across traditions. Instead, the point of this context is to show the particular types of compassion that are the aim and object of cultivation in the *Lojong* tradition. To this end, I include a focus on the "preliminaries" that are seen supports and preconditions for the cultivation of compassion. I also examine the relationship between other mental states and compassion, such as the attitude of renunciation (nges 'byung). This is because *Lojong* as a tradition cannot be understood separately from its context within the "stages of the path" (lam rim), an approach to spiritual development that lays out the process of moving from a beginner to an advanced contemplative in systematic steps. Both traditional and contemporary *Lojong*-based practices for cultivating compassion therefore include and rely upon practices for generating other, complementary mental states, and compassion is better understood in relation to these states than independently. The expansiveness of the types of compassion being cultivated in *Lojong* can be quite surprising. To a great extent, the surprise here comes from the way that these forms of compassion violate many expectations that may arise if we treat compassion in the *Lojong* tradition as a simple, common mental state as it might be approached in a

contemporary psychological paradigm. In other words, the intention here is both to explicate the texts but also to engage in a moment of *ostranenie*, a "defamiliarization" or "making strange" (Shklovsky, 1965) of the idea of compassion in order to see it in a new light. Without realizing how dramatic the *Lojong* forms of compassion are, the dialogue between the cognitive sciences and the *Lojong* tradition will be undermined.

Chapter four continues the examination of compassion in *Lojong* texts with a focus on Tsongkhapa's Great Treatise, but turns specifically to the question of phenomenology. The chapter begins by proposing that there is an implicit phenomenology of compassion presented in Lojong texts. I argue that the Lojong texts can be seen as resting on three pillars, of which phenomenological description is one, while the other two are scriptural citation and reasoning. I draw out and analyze specific passages to show that this is the case. Compassion, however, has not yet received serious treatment by phenomenologists, so I try to plant the seedling of a phenomenology of compassion within the soil of phenomenological debates in general. I look to empathy as the closest topic that has received significant attention in phenomenology, concentrating on the work of Zahavi (2008), who relies primarily on Husserl. I ultimately depart from Zahavi, however, to follow the work of Heidegger (2008), who argues for an interpretive phenomenology. This, I argue, is a good basis for developing a phenomenology of compassion as presented in *Lojong* texts and practices, because a function of the meditative cultivation in *Lojong* is the reshaping of subjectivity in a way that changes interpretations of reality that in turn actually change perception. Because there is still such limited research in this area, this chapter proceeds on a more theoretical and philosophical level. Here I begin to explore what a phenomenology of compassion might be, drawing on the work not only of philosophers, but also developmental psychologists such as Rochat (2009a) and Bowlby (1983), who stress the centrality of attachment, affiliation and social cognition. My hope is that the theoretical orientation provided here may eventually provide the basis for more detailed scholarly and empirical study.

Chapter five looks to relate compassion and its cultivation in the *Lojong* tradition to contemporary work in psychology, particularly research in grounded cognition and emotions. I provide an overview of contemporary theories of emotions, explaining why and how they differ, and then explore the question of which contemporary theory seems to align most closely with the approach taken in Buddhist traditions, focusing mainly on the *Lojong* tradition, but including a consideration of Buddhist thought from outside *Lojong* as well. I explain the perspective of grounded cognition, which I find to be a compelling account of cognition and its relationship to human embodiment and perception, and then argue that grounded cognition offers great potential for the study of religious and contemplative practices. I explore some of these possibilities and put forth a model for relating grounded cognition research specifically to contemplative practice. This model can be empirically tested, although the present dissertation cannot offer empirical support for it at present.

The conclusion, in addition to briefly reiterating some of the main arguments that have been made, also offers the theoretical beginnings for what I call a "relational theory of meaning," which complements the existing theories of meaning being investigated in fields such as positive psychology and which stems from the work in this dissertation on compassion and its underlying importance in human existence and human flourishing. I

23

connect the work of the dissertation in general to the topic of "secular ethics," and then end with suggestions for future lines of research.

Lojong and the Use of Lojong Source Texts

The Buddhist *Lojong (blo sbyong)* tradition emerged in Tibet in the eleventh century. Meaning "thought transformation" or "mind training," *Lojong* can be understood in at least three senses. In the broadest sense, the term is sometimes applied to all of the Buddha's teachings, since they are all understood as being for the purpose of transforming the mind.³ In a narrower sense, *Lojong* refers to texts that focus on particular styles of meditation, and in this sense the term is sometimes retrospectively applied to Indian texts, such as Śāntideva's *Bodhicaryāvatāra*, that contain teachings considered of central importance to *Lojong* training as it emerged in Tibet. In the narrowest sense (and the sense in which the term will be used in this work), *Lojong* refers to a genre of literature that emerged through the writings of, and in the wake of, Atiśa Dīpamkara (982-1054). The distinctive features of this genre and its associated practices will be one of the foci of the dissertation.

In the sense of a genre of literature and associated practices, *Lojong* texts concentrate on relatively simple to explain (although not necessarily simple to execute) practices that are often not elaborated in a very philosophical manner. These practices aim to transform mental states and behaviors that are harmful to oneself and others into mental states and behaviors that are beneficial to oneself and others. In his anthology of texts from the *Lojong* tradition, *Mind Training*, Thupten Jinpa writes that the various

³ This claim is made repeatedly in *Lam rim* and *Lojong* works (cf. Engle, 2009:23; Jinpa, 2006; Tsongkhapa, 2004).

etymologies of the term *Lojong* all point to "the salient idea of transformation, whereby a process of training, habituation, cultivation, and cleansing induces a profound transformation—a kind of metanoesis—from the ordinary deluded state, whose modus operandi is self-centeredness, to a fundamentally changed perspective of enlightened other-centeredness."(2006:1-2)

The first term in the name *Lojong* is the Tibetan word *blo*, which can be both more extensive and at the same time more specific than the English word "mind." It can relate to a single moment of cognition or to a single moment of subjective experience. More broadly, it can refer to the array of mental structures that condition and structure experience. Furthermore, since the second term, *sbyong*, refers to a complete transformation, the term *Lojong* can be understood as involving a "transformation of subjectivity," the goal of which is a complete reorientation of the person away from selfcenteredness or "self-cherishing" (bdag gces) towards altruism or "other-cherishing" (gzhan gces). Artemus Engle notes how Lojong commentaries often use the term "develop a mental change" (Tib. yid 'gyur skye ba) (Engle, 2009:7). Such terms bear a certain similarity to the Christian spiritual term *metanoia* which etymologically means a change in one's mind (Wirzba, 1995). Understood another way, *blo sbyong* refers more narrowly to the generation of two specific "minds" or mental states (blo): those of conventional and ultimate *bodhicitta*, namely the deeply felt aspiration and commitment to attain full enlightenment for the sake of all sentient beings, and wisdom realizing the ultimate nature of reality, emptiness (Rinchen, 1997).

The *Lojong* tradition is closely connected with two other traditions: the Lamrim (*lam rim*) or "stages of the path," and the the Kadam (*bka' gdams*) tradition. The latter is

typically understood as referring to a tradition of taking all of the Buddha's speech or teachings (*bka'*) as personal instructions (*gdams*) for practice or alternatively as "those who understand the sacred words of the Buddha in terms of Atiśa's instructions" (Rinchen, 1997:18). Both of these traditions are also credited to Atiśa Dīpamkara, whose *Lamp for the Path to Enlightenment* (*byang chub lam gyi sgron ma*) is considered the first Lamrim text.

As already noted, several contemporary compassion training interventions and protocols, including Cognitively-Based Compassion Training (Negi, n.d.; Ozawa-de Silva and Negi, 2013), Compassion Cultivation Training (CCARE, 2009); and others (Hurley, n.d.), explicitly point to certain *Lojong* texts as source material for their programs. There are a number of reasons, therefore, that justify a close examination of the key *Lojong* source texts especially within the context of contemplative science and the emerging dialogue between contemplative traditions (both traditional and secular, contemporary ones) and modern science. Dunne (2015) enumerates several of these reasons, as will be noted later, but he also warns that contemporary readers should not necessarily assume that prescriptive texts, such as meditation manuals, necessarily describe practice as it is actually carried out in lived practice communities. He notes, "these sources are best engaged along with the practical expertise of an actual practice community. Texts ideally should be read in relation to the living practices of such communities, and those practices should likewise be studied independently of textual interpretations through methods such as ethnography" (Dunne, 2015).

Unfortunately, thoroughgoing ethnographic research on contemplative practices remains somewhat scant, especially for the *Lojong* tradition. Nevertheless, the approach

taken in this dissertation attempts to at least acknowledge the problem raised by Dunne by treating *Lojong* texts critically and by interpreting them alongside a variety of other types of material, including scholarly and scientific literatures and the author's own personal experience as both a researcher and meditation instructor in the Cognitively-Based Compassion Training program.

The primary texts that are included in this study include some of the most important *Lojong* texts in the Tibetan tradition for contemporary compassion training programs, as well as a smaller number of Indian texts that are frequently cited and viewed as foundational for the Tibetan Lojong tradition. Atisa's Lamp (Rinchen, 1997) is an important text here, as it is regarded as the first *lam rim* text and lays forth several key features that become important for the *Lojong* genre. Even more important, however, is Tsongkhapa Lobsang Drakpa's (tsong kha pa blo bzang grags pa) (1357-1419) substantial elaboration of Atisa's system in his Great Treatise on the Stages of the Path to Enlightenment (lam rim chen mo). Importantly for present purposes, Tsongkhapa's Great Treatise goes into significant detail in explaining the importance of compassion and how it is to be practically cultivated in accordance with the two traditions of the "seven limb cause and effect method" (rgyu 'bras man ngag bdun) and the "equalizing and exchanging self and others method" (bdag gzhan mnyam brje). Tsongkhapa's lam *rim* quickly achieved seminal importance within the tradition as a whole. As Geshe Thupten Jinpa writes:

Following Tsongkhapa's (1357-1419) composition of the influential classic, *The Great Treatise on the Stages of the Path to Enlightenment*, not only did the stages of the path become a definitive mark of the Geluk

27
school, but the very term *lamrim* came to be almost equivalent to Tsongkhapa's texts on the subject. (Jinpa, 2006:4)

More important than that, however, is the fact that Tsongkhapa's *Great Treatise* serves as an important basis for at least three contemporary compassion training protocols being employed in contemplative science, as noted above. Tsongkhapa's *Great Treatise* does not, however, explicate a certain important component in the cultivation of compassion that those protocols emphasize, namely *yid 'ong gi byams pa*, which can be translated as "affectionate love," "love that sees the other as attractive" or "love that sees the other as precious." For this particular section, the dissertation examines the *lam rim* teaching of Pabongka Rinpoche's *Liberation in the Palm of Your Hand (rnam sgrol lag bcangs su gtod pa'i man ngag zab mo tshang la ma nor ba mtshungs med chos kyi rgyal po'i thugs bcud byang chub lam gyi rim pa'i nyams khrid kyi zin bris gsung rab kun gyi bcud bsdus gdams ngag bdud rtsi'i snying po) (Pabongka, 2006).*

There are several Indian texts that are looked back upon by the *Lojong* tradition with regard to their explanation of compassion and its cultivation, of which two important examples are Śāntideva's *Bodhicaryāvatāra* (BCA) and Candrakīrti's *Madhyamakāvatāra* (MA). Of these two, BCA is arguably more important for understanding compassion in the *Lojong* tradition, because it is frequently referenced as the source for the important practice of "exchange of self and others" (Pabongka, 2006). The first chapter of MA, which dwells on compassion, however, is also often referenced in Tibetan works such as Tsongkhapa's *Great Treatise* (Tsongkhapa, 2004). Here, the BCA was consulted in conjunction with Gyaltsab Je's (*gyal tshab rje*) (1364–1432) commentary on the work, which especially appropriate as Gyaltsab Je was a principal

disciple of Tsongkhapa and his immediate successor. Tsongkhapa himself also cites frequently from both BCA and MA in his *Great Treatise*.

Other texts that have been consulted for this present work include Atiśa's Bodhisattva's Jewel Garland, Langri Thangpa's (1054-1123) Eight Verses on Mind Training, Geshe Chekawa's Seven-Point Mind Training, Tsongkhapa's The Foundation of All Good Qualities, Dharmarakşita's The Wheel of Sharp Weapons, Gampopa's Ornament of Liberation, and sections of the Book of Kadam. Again, this dissertation will not focus on the historical relationship among these texts nor their historical context. Although such work would be valuable, the present interest is confined by attention to the role these texts play as source material for contemporary compassion training interventions that take Lojong as a source tradition.

The *Lojong* texts just enumerated comprise only one set of sources examined in this dissertation, naturally. Other sources include secondary literature and empirical research in the fields of religious studies, anthropology, sociology, psychology, social and cognitive neuroscience, and philosophy. In these fields, my particular focus has been on the areas of subjectivity, emotions, phenomenology, the body, and grounded cognition. This dissertation is furthermore informed by my own personal experience of *Lojong* practices in various Tibetan Buddhist settings since 2003 (primarily in a western Tibetan Buddhist Dharma Center, but also for briefer periods in traditional settings in Dharamsala, India, and at the monastic universities of Drepung, Ganden and Sera in south India), and in the contemporary, secularized settings of Cognitively-Based Compassion Training (CBCT) courses, where I have served in the multiple roles of practitioner, instructor, and researcher. As an instructor, I have taught CBCT courses over twenty times to a number of different non-clinical populations. During my graduate years I have also had the good fortune to be a member of research teams engaged in the scientific study of meditation, including studies run by Dr. Charles Raison, Dr. Susan Bauer-Wu and Dr. Lawrence Barsalou. I have been the principal grant writer for three grants to engage in scientific studies of meditation practices—two for CBCT studies in Atlanta elementary schools, and one for a study of Naikan (a Japanese contemplative practice secularized from the True Pure Land tradition) at two Naikan centers in Japan. The data from the two of these three studies that have been completed have been written up for publication in journals and are not included in this dissertation, but the experience of running such studies opened my eyes to a number of issues that would never have reached my awareness otherwise, and informs much of the content of this dissertation.

Positive Psychology: Origins and Opportunities for Growth

Compassion can be seen as a prosocial emotion and also as a character strength or virtue; as such, it is included under the broad umbrella of the "positive psychology" movement, which has oriented psychologists towards the systematic study of happiness, flourishing, well-being, positive emotions, character strengths, and virtues. As such, a study of compassion has obvious implications for the field of positive psychology, and one of the aims of this dissertation is to contribute to the field of positive psychology in very specific ways, which will be enumerated below, after a brief overview of positive psychology and its development.

In 1998 Martin Seligman, then president of the American Psychological Association, used his presidential address at the annual convention to announce the need for "a new science of human strengths" rather than the study of mental disorders and dysfunction. The following year Seligman and Mihalyi Csikszentmihalyi published the article "Positive psychology: An introduction" in the journal *American Psychologist* (Seligman and Csikszentmihalyi, 2000).

The section of Seligman's address that dealt with positive psychology is interesting because it places the development of positive psychology within a particular historical and geographical context, lending it a certain ideological, political and normative dimension from the beginning. The section begins as follows:

Entering a new millennium, we face a historical choice. Standing alone on the pinnacle of economic and political leadership, the United States can continue to increase its material wealth while ignoring the human needs of our people and of the people on the rest of the planet. Such a course is likely to lead to increasing selfishness, alienation between the more and the less fortunate, and eventually to chaos and despair.

At this juncture, psychology can play an enormously important role. We can articulate a vision of the good life that is empirically sound and, at the same time, understandable and attractive. We can show the world what actions lead to wellbeing, to positive individuals, to flourishing communities, and to a just society. Ideally, psychology should be able to help document what kind of families result in the healthiest children, what work environments support the greatest satisfaction among workers, and what policies result in the strongest civic commitment.

Yet we have scant knowledge of what makes life worth living. For although psychology has come to understand quite a bit about how people survive and endure under conditions of adversity, we know very little about how normal people flourish under more benign conditions (Seligman, 1999).

In other words, positive psychology begins with an ethical commitment and a critical analysis of global inequality. For the US to increase its wealth while "ignoring the human needs of our people and of the people on the rest of the planet" would not only be morally wrong, but also pragmatically short-sighted, since it would not lead to happiness, but rather to "chaos and despair." We should note also the almost messianic role to be played by psychologists, and in particular American psychologists. Why can American psychologists "show the world" what leads to well-being and a just society? Precisely because Americans have achieved such levels of wealth and geopolitical power. Implicit in Seligman's address therefore are the ideas of those in psychology who came before him, and who also certainly contributed to the development of the ideas of positive psychology, namely Abraham Maslow and Carl Rogers, the key figures of humanistic psychology. Maslow (1943) famously identified a "hierarchy of needs" that placed physiological needs (breathing, sleeping, food, water) at the base, followed by security (of resources, health, and so on). Seligman did not once mention Maslow or humanistic psychology in his address, a failure of acknowledgment for which he was later criticized by many (e.g., Fernandez-Ríos and Novo, 2012), especially as Maslow had even used the term "positive psychology" in his writings over thirty years earlier (Maslow, 1968). Nevertheless, implicit in his statements is a recognition that Americans had largely solved the problems of the first two tiers of Maslow's hierarchy, and yet had done little to address the higher levels (love/belonging, esteem, and self-actualization) that would be necessary not only for genuine flourishing and happiness, but also for the prevention of mental distress. Similarly, Carl Rogers (1961) saw the purpose of psychology and psychotherapy to be not merely the treatment of disorders, but the cultivation of "unconditional positive regard," which he saw as essential for healthy development. This involved an acceptance and support of another individual regardless of what he or she

does, and therefore is a concept very close to the *Lojong* understanding of *byams pa* or love.

Seligman (1999) notes in his address that:

...psychology has become a science largely about healing. It concentrates on repairing damage within a disease model of human functioning. Such almost exclusive attention to pathology neglects the flourishing individual and the thriving community... When we became solely a healing profession, we forgot our larger mission: that of making the lives of all people better.

Noting that despite unprecedented economic development in the US, depression has been on the rise, especially among the young, Seligman searches for an answer:

I look not toward the lessons of remedial psychology with its emphasis on repairing damage. Instead, I look to a new social and behavioral science that seeks to understand and nurture those human strengths that can prevent the tragedy of mental illness. For it is my belief that no medication or technique of therapy holds as much promise for serving as a buffer against mental illness as does human strength. But psychology's focus on the negative has left us knowing too little about the many instances of growth, mastery, drive, and character building that can develop out of painful life events.

In their seminal publication the following year, Seligman and Csikszentmihalyi described positive psychology as "A science of positive subjective experience, positive individual traits, and positive institutions...to improve quality of life and prevent the pathologies that arise when life is barren and meaningless" (Seligman and Csikszentmihalyi, 2000). Only some five years after the launching of positive psychology, Gable and Haidt (2005) noted that the field's remarkable growth was due to the fact that it "filled a need" and "guided researchers to understudied phenomena," but that "positive psychology may not be around for much longer," because if it "is successful in rebalancing psychology and expanding its gross academic product, it will become obsolete." It has been nearly a decade since that pronouncement, but positive psychology is larger than ever. In 2013, some 1,200 people from 54 countries attended the Third World Congress on Positive Psychology. There are now three Master's degree programs in Positive Psychology in North America alone, and one doctoral program, at the Claremont Graduate School.

Connections between positive psychology and contemplative science are not difficult to draw: both have to do with the study of human flourishing and both are based on the premise that intentional effort can yield changes in psychological health. Furthermore, both see this process as not being restricted to a "medical model" of diagnosing and treating specific disorders through an intervention, but rather as having the potential to increase strengths beyond a current state. Fernandez-Rios and Cornes (2013), for example, maintain that positive psychology "seeks to build intrapersonal and interpersonal resources not only for invulnerability but also for personal development and in the search for happiness." This, they note, "is related to the healthy regulation of cognition, emotions and actions." This could easily be a description of the aim of many contemporary secular contemplative practices that are currently being studied in contemplative science.

Despite these obvious resonances, however, there has not been significant crossover in terms of academic research or conferences between the two fields. Although as originally conceived (evidenced by the quotes above from Seligman's initial address), positive psychology included a strong normative, ethical and social justice dimension, actual positive psychology has largely focused on positive emotions (Lyubomirsky et al., 2005), the concept of "flow" developed by Csikszentmihalyi (1991), meaning in life (Steger et al., 2008) and a small subset of virtues such as gratitude (Emmons and McCullough, 2004), forgiveness (Worthington, 2005) and optimism (Lopez and Snyder, 2009), most of which are studied only at the level of the individual.

The lack of crossover between positive psychology and contemplative science may be a result of the fact that both are relatively new fields that are still in the process of establishing themselves. Regardless of the reason, the result is that there are several areas of positive psychology that could be considerably strengthened through attention to contemplative traditions and contemplative practice. Not only can contemplative science in general make a contribution to positive psychology, but specifically the study of compassion cultivation in the *Lojong* tradition and in contemporary secular practices that are based on that tradition can make a significant contribution, as will be explored in this dissertation. This is because the *Lojong* tradition represents a sophisticated tradition that has developed over a long period of time, and is therefore, as will be shown in chapter three, comparatively rich both in terms of practices (many of which may be considered akin to positive psychology interventions) and the theoretical models that are used to explain such practices.

Where specifically can we see areas where contemplative science can make a contribution to positive psychology? The first is in the area of positive psychology interventions. From the beginning, as we have seen, positive psychology as a movement

was interested not only in studying the factors that contribute to and characterize human happiness and well-being, but also the development of interventions that would strengthen those factors. In a 2005 article entitled "Positive Psychology Progress: Empirical Validation of Interventions," Seligman et al. (2005) report data from a study that examined five brief positive psychology "internet-based interventions." The authors designed the five "happiness exercises" themselves, along with one placebo control exercise, to be engaged in for a time period of one week. The happiness exercises focused on building gratitude (writing and deliver a letter of thanks in person), increasing awareness of what is positive about oneself (e.g. by writing down three good things that happened that day, and their causes), and identifying strengths of character (e.g. to note one's character strengths and then use them more often for one week). Subjects were recruited via Martin Seligman's own website (www.authentichappiness.org) and then randomized to one of the six conditions. They were then delivered the intervention online, and were also assessed online. Seligman et al. reported that "Two of the exercises—using signature strengths in a new way and three good things-increased happiness and decreased depressive symptoms for six months. Another exercise, the gratitude visit, caused large positive changes for one month" (Seligman et al., 2005:416).

According to Google Scholar (retrieved October 15, 2014), this particular article has been cited 2,350 times. It is considered a landmark article in positive psychology, and is referenced overwhelmingly to show that positive psychology interventions can increase subjective well-being and decrease depression scores with effects that last up to six months. For several years, no one sought to replicate Seligman et al.'s (2005) remarkable findings. In recent years, however, several studies have emerged that suggest that positive

psychology interventions such as those developed by Seligman and his colleagues are far less effective than had been previously believed. Mongrain and Anselmo-Matthews (2012) sought to replicate the study but with a less skewed sample. Seligman et al. had recruited subjects from his own website, many of whom had come to the website from having read his book, Authentic Happiness. With a less skewed sample and a better control condition alongside the positive psychology exercises (PPE), Mongrain and Anselmo-Matthews concluded, "the positive placebo (positive early memories) produced effects that were as significant and as long lasting as those of the 'Three good things' and 'Using signature strengths in a new way' exercises... In sharp contrast to the findings reported by Seligman and colleagues (2005), the PPEs did not lead to significantly greater reductions in depression over time compared with the control group" (Mongrain and Anselmo-Matthews, 2012:387). More recently, Woodworth (2014) sought to replicate Seligman's findings for his doctoral thesis, but similarly concluded that "although all groups showed an increase in happiness levels and a decrease in depression levels over time, there was no differential effect between the PPEs and the control exercise" (Woodworth 2014).

This is, of course, only one study and the attempts to replicate it, but it is one of the most cited and highly regarded studies in the area of positive psychology interventions. Reviewing the literature on positive psychology interventions more broadly does not yield a much more promising picture. The most comprehensive meta-analysis of positive psychology interventions to date (Bolier et al., 2013) found small effect sizes and also found that interventions were "more effective...if the study design was of low quality." The selection criteria used by Bolier at al. were strikingly broad: all studies on positive psychology interventions since 1998 that had been published in a peer-reviewed journal, involved randomization of subjects, included statistics to enable calculation of effect sizes, and involved measuring either well-being, depression, or both. Nevertheless, the authors could find only 39 studies to include, of which few were of high quality. For example, only 7 of the 39 studies employed randomization (allocation) concealment, whereby the allocation of the subject to one of the conditions is concealed from investigators until the subject is entered into the study. Assessing the quality of each study through a short scale of six criteria based on the Cochrane collaboration, Bolier et al. (2013:119) determined that "Twenty studies were rated as low, 18 were of medium quality and one study was of high quality. None of the studies met all quality criteria."

This suggests that positive psychology is a field that could benefit significantly from collaboration with contemplative science. In contrast to positive psychology interventions, which generally take a few minutes to complete, and which are not typically grounded in a rich theoretical framework, the interventions studied in contemplative science are of significantly greater complexity and intensity. Although research in contemplative science is still at an early stage, the reported effects of sustained engagement in contemplative practices and secularized protocols that have been developed out of contemplative traditions (such as Dialectical Behavioral Therapy (DBT), Mindfulness-Based Cognitive Therapy (MBCT), and so on) greatly overshadow those obtained through positive psychology interventions. It is true that contemplative science itself is a young field, and many published scientific studies of contemplative practices are also not of the highest quality, especially studies in real-world settings such as schools (Meiklejohn et al., 2012). Nevertheless, there is a considerably larger body of research in the scientific study of contemplative practices than there is in the study of positive psychology interventions, and the sheer difference in size most likely accounts for a difference in the number of higher quality studies.

Although recently some in the field of positive psychology have turned to "love" (Fredrickson, 2013), positive psychology has largely ignored "compassion" as a construct, in favor of focusing on other emotions and virtues, including optimism, gratitude, humility, and forgiveness. For example, in Bolier et al.'s (2013) meta-analysis, only one of the studies included in the analysis involved an intervention that dealt with compassion, love or self-compassion. Nevertheless, although even just a few years ago it would have been very premature to speak of a "science of compassion," the scientific study of compassion has advanced quickly in just the past decade, with major annual conferences now dedicated to the scientific and interdisciplinary study of compassion (e.g. the annual "Science of Compassion" conferences held by Stanford's Center for Compassion and Altruism Research and Education). This has occurred, however, in the emerging field of contemplative science, and not in positive psychology, although there is one notable exception in the case of Dutton's work on compassion in organizations (Dutton et al., 2014).

There are several areas where contemplative science can make a significant contribution to the development of positive psychology. Although only the first has been examined up to this point, the others will be addressed in the remainder of this dissertation. The areas are: 1. *Strengthening interventions:* Current positive psychology interventions are considerably less sophisticated and well-developed when compared to the interventions studied in contemplative science (cf. Bolier et al., 2013).

2. *Ethics and social benefit:* Despite having its origins in an ethical and normative orientation (as seen above from Seligman), positive psychology has lacked a theoretical framework for the relationship between individual well-being, flourishing, or happiness, on the one hand, and social good, on the other. While contemplative science has also been more focused on the individual than the social implications of contemplative practice, and has also addressed ethics only tangentially, this has shifted in recent years as scholars in contemplative science have attended more to compassion-based interventions. Contemplative traditions themselves, such as *Lojong*, are rooted strongly in an ethical framework and a conception of the relationship between individual and social good, and can thereby be of potential assistance in this regard. Some of these connections are explored in the next section of this chapter, and in following parts of the dissertation.

3. Accounting for religion and spirituality: While acknowledging that religion and spirituality play a central part in people's lives and conceptions of well-being, positive psychology has struggled greatly to find a place for this in its theoretical models. Since contemplative science centers around the scientific study of secularized contemplative practices that originate from religious traditions (and often non-western religious traditions), it may be able to help positive psychology differentiate those aspects of religion and spirituality that contribute to well-being, and those which may be detrimental to it. It may also help positive psychology develop a richer set of understandings with

regard to what "well-being" is, and how it may be variously conceptualized and manifested in lived experience.

4. An expansion of what constitutes "meaning in life": Perhaps because of its lack of deep attention to religion, spirituality, ethics, and social consciousness, the construct of "meaning in life" in positive psychology remains individualistic and goal-oriented, and therefore relatively underdeveloped when compared to contemplative traditions such as *Lojong* (cf. Steger et al., 2008). Implications of *Lojong* for reaching a deeper understanding of "meaning in life" are explored in the conclusion of this dissertation.

5. *A more nuanced understanding of emotions:* Instead of categorizing emotions on the basis of positive or negative affect, as many associated with positive psychology do (cf. Fredrickson, 2008; Lyubomirsky et al., 2005), contemplative traditions such as *Lojong* focus on whether the emotion brings long-term benefit to self and other. This topic is explored in detail in chapter five of this dissertation.

6. *Greater attention to embodiment:* Apart from the research on flow (Csikszentmihalyi & Csikszentmihalyi, 1991), positive psychology has largely treated happiness, well-being and flourishing as if they were independent of the body and bodily processes. This topic is also explored in chapter five of this dissertation.

7. A more sophisticated accounting of consciousness: Despite the emphasis on subjective well-being, positive psychology has not addressed the difficult issues of consciousness the way contemplative science has attempted to (even if the latter has not succeeded fully in this difficult task). Therefore issues such as neurophenomenology and the nature of consciousness, for example, are not even on the table, despite the fact that they could contribute significantly to the positive psychology enterprise. How *Lojong* could contribute to the development of a contemplative neurophenomenology is explored in chapter four of this dissertation.

The present work cannot provide an exhaustive investigation of the ways in which the *Lojong* tradition, and contemplative science that engages the *Lojong* tradition, could address all of these lacunae. Specific aspects of the sevel points raised above, however, will be addressed in detail, and hopefully this will convince readers that a dialogue between contemplative science and positive psychology is both fruitful in a general sense, and can also take place along very specific lines that will be laid out here as particularly conducive for research and investigation.

As mentioned, positive psychology has largely ignored the prosocial emotion of compassion. One popular assessment of strengths and virtues, designed by Peterson and Seligman (Peterson and Seligman, 2004), does include "love," "kindness," and "forgiveness and mercy" among its catalog of 24 traits. Yet while forgiveness has indeed received sustained attention (cf. Worthington, 2005), the other areas of love, kindness and mercy have been comparatively ignored, compared to topics such as gratitude, meaning, positive emotions, and flow. A notable exception is Fredrickson's (2013) study of love. However, Fredrickson defines love as "positivity resonance" or shared micro-moments of positive emotion (Fredrickson, 2013). This is a somewhat reductionist account of love, however, because it unmoors love from any clear connection to long-term relationships and commitments, morality, and social good. We can say that Fredrickson's "love," therefore, is quite different from compassion, as will become clear.

In the contemporary interdisciplinary scholarship on compassion, compassion is typically broadly defined as a deep feeling of wishing to alleviate the suffering of others

42

(Gilbert, 2005; Goetz et al., 2010). Despite some variation in this literature, a broad consensus is emerging regarding specific dimensions of compassion, at least as studied in the contemporary scientific community and the disciplines of social neuroscience, and clinical and cognitive psychology. The works of Ekman (2008), Gilbert (2005), Lutz et al. (2004, 2008), Neff (2011a), and Singer and Bolz (2013) show that despite a variety of conceptualizations of compassion, there is broad consensus that compassion involves 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 or an action that stems from compassion). One of the advantages in the area of compassion research is that it involves an extended network of researchers from a variety of fields. This can be seen in the edited volume, Compassion: Bridging Theory and *Practice*, Singer and Bolz (2013), which draws together contributions from researchers in psychology, neuroscience, religious studies, philosophy, medicine, and other disciplines, and which arose from a working conference in which most of the volume's contributors participated.

In surveying the research on compassion, we might elaborate on the above dimensions of compassion as follows:

Affective: How strong is the sense of endearment and affection towards the other? How contrived or conceptual is the state of compassion versus how fully and physiologically embodied and non-conceptual is it? Is it spontaneous? Is the sense of affection based on bias and partial (friend versus 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)?

As we have seen, the *Lojong* tradition focuses most heavily on generating cognitive and affective states, rather than, say, prescribing a certain set of behaviors as compassion. Therefore the fourth of the above dimensions, behavior, appears to be the result of compassion, rather than compassion itself—at least from a *Lojong* perspective. If it exists in a cause-and-effect relation to compassion, compassionate behavior is not strictly compassion itself; nevertheless it is quite possible that 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. This should be an area for future research.

Compassion itself would therefore be the cognitive, affective and motivational state itself, even prior to visible behavior. It can also be biased and restricted (biological compassion; biased compassion; limited compassion) or unbiased and universal (see the more detailed explication in chapter three). Lastly, in addition to the cognitive, affective, motivational/aspirational, and behavioral dimensions, there may be an "attentional" dimension, especially when generating compassion through meditation: is one's compassion focused and stable, 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 might contain all five of these dimensions to a high degree.

The above discussion does not address the full complexity of the research on compassion, which is still emerging and developing, but it is already enough to indicate that research on compassion as a prosocial emotion can contribute to positive psychology by showing how one can approach the study of character strengths and virtues in a sophisticated, interdisciplinary way. Furthermore, researchers in compassion acknowledge that the cultivation of compassion can be a difficult task that requires complex methods (such as the elaborate protocols of Emory's Cognitively-Based Compassion Training and Stanford's Compassion Cultivation Training) based on contemplative traditions (Singer and Bolz, 2013), and that significant expertise and training may be required to attain the greatest benefits from compassion (Lutz et al., 2008).

The complexity and intensity of contemplative practices, such as *Lojong*-derived compassion training methods, may arise out of a recognition of how difficult it is to cultivate sustainable, unbiased compassion. Such cultivation requires attaining a degree of impartiality. This is no easy task, as can be seen from the work of Blogowska and Saroglou (2011:46), who write:

Recent research has established that, contrary to religions' explicit discourse valuing universal altruism, compassion, and love, religious prosociality in interpersonal contexts (e.g., willingness to help) is discriminatory and limited. It does not apply to people who threaten religious values (Batson, Anderson, and Collins 2005); it is limited to the circle of interpersonal relationships within which reciprocity is engaged and does not extend to unknown targets (Saroglou et al. 2005); and it extends to a nation's homeless but not to foreigners in need (Pinchon and Saroglou 2009). Several factors seem to be responsible for the limited and conditional character of religious prosociality: positive self-perception needs, rather than altruistic motivation (Batson, Schoenrade, and Ventis 1993; Batson, Anderson, and Collins 2005); reputational concerns (Norenzayan and Shariff 2008); coalitional objectives (Kirkpatrick 2005); and the need for an ordered universe through the maintenance of specific just-world beliefs (Pinchon and Saroglou 2009; see also Saroglou in press).

Given this, it is unlikely that the relatively simple methods currently employed as positive psychology interventions will yield major and long-lasting changes in the cultivation of universal compassion. If this holds true for compassion, it may hold true for other character strengths and traits identified by positive psychology as well. What we require is therefore a sophisticated understanding of how contemplative practices such as compassion cultivation in *Lojong* can be understood within the context of, or at least in dialogue with, contemporary research in psychology and the cognitive sciences. If we can do so, then compassion research has the potential to contribute significantly to positive psychology, by addressing—at least partially—each of the lacunae listed above: developing effective, lasting interventions, attending to social benefit, and developing a more sophisticated understanding of religion and spirituality, meaning in life, emotions, embodiment and consciousness.

CHAPTER TWO: TOWARD A CONTEMPLATIVE SCIENCE

As noted above, the larger context of this work is what we may term "contemplative science." This is more specific than discussing a dialogue between "Buddhism and science," because interest in contemplative science is not concentrated around issues like reincarnation, buddha realms, or monastic discipline, but rather around how we might investigate the more experiential and empirical elements of Buddhist contemplative practice. Although some scholarship is devoted to other issues, it is in this area that we have seen strong interest in the past decade (Davidson et al., 2012; Goyal et al., 2014).

In chapter one, we explored the potential that can come from such an endeavor, and I offered an initial description of the project of "contemplative science" as I envision it. In reality, however, there is as of yet no clear consensus regarding what contemplative science is or could be. Indeed, there are different and often contradictory approaches. This chapter explores that question from multiple angles in order to build a richer picture of the context surrounding contemplative science. The intention is to address certain key issues that will be important for contemplative science, and also to situate the present work within this broader context.

In this chapter, therefore, I provide a very brief survey of a number of works that address the question of "contemplative science" writ large. I focus, however, on a few key works, beginning with those of B. Alan Wallace (Wallace, 2007, 2008) and Edward Slingerland (Slingerland, 2008a). Both of these respected scholars engage in projects similar to the present work. I argue, however, that while both approaches have value, they are ultimately marred by the imposition of metaphysical assumptions that are not warranted in present scholarship. In the case of Wallace, I consider what I believe to be metaphysical assumptions that are drawn from Buddhism (in fact, specific Buddhist traditions) that are introduced into the contemplative science project without a strong empirical or rational basis. In the case of Slingerland, I show how such metaphysical assumptions can be introduced in the name of science as well. Whichever the avenue, such metaphysical shuttling is problematic for the field of contemplative science.

To show that such metaphysical problems can be avoided, I then turn to the Dalai Lama. His approach, I believe, navigates between these two extremes, in part by connecting contemplative science to "secular ethics." I devote one section to the presentation of secular ethics and unpack what I see to be its meaning in terms of contributing to the emerging field of contemplative science. I believe that the Dalai Lama makes subtle and interesting arguments for establishing an ethical system relatively free from metaphysical assumptions, and I read his work in concert with critiques of the idea of secular ethics, including those by the literary theorist Stanley Fish (Gyatso, 2006, 2011; Fish, 2010).

Following these sections, I move to consider more closely the question of reductionism. Since contemplative science includes the scientific study of contemplative practices, the question of reductionism is unavoidable and should be addressed head on by those interested in establishing a robust contemplative science. I examine reductionism by looking at the work of Wayne Proudfoot (1985), Anne Taves (2009),

49

and a number of scholars who draw from his distinction between descriptive and explanatory reductionism.

The chapter concludes with an examination of mindfulness, another important topic for contemplative science. Among various forms of contemplative practice, mindfulness has arguably become the most culturally salient. As will be shown, it has received a great deal of attention in the scientific study of meditation and also in popular press, but this has been accompanied by a significant amount of confusion regarding what mindfulness is. Mindfulness also plays a role in the Lojong tradition and also in CBCT, CCT and other Lojong-based contemporary meditation protocols, but it will be shown that these practices do not employ the term mindfulness in the same way as contemporary mindfulness-based interventions (Negi, n.d.; CCARE, 2009). Drawing from the work of Dunne (2015) and Gethin (2011, 2015), I examine the differences between traditional and contemporary accounts of mindfulness, and suggest a broader approach for contemplative science that can acknowledge these differences and also the importance of analytical meditation practices alongside contemporary mindfulness approaches. It is hoped that such attention will benefit not only an understanding of Lojong and Lojong-based practices, but also contemplative science in general.

Wallace: Replacing Science

Only a few short pieces (Britton et al., 2013; Dunne, forthcoming) and even fewer longer ones (Loizzo, 2012; Varela et al., 1991) have attempted to outline the interdisciplinary field of study that could broadly be considered "contemplative science." Most of these works do not use the term "contemplative science" and if they do, they often do not define it. The one work that does clearly bear the name is B. Alan Wallace's book *Contemplative Science* (Wallace, 2007), which proposes a new discipline that would bear that specific name. Such a discipline would emerge from bringing together data collected from the first-person observations of mental phenomena with the types of third-person methods employed in modern science:

Just as scientists make observations and conduct experiments with the aid of technology, contemplatives have long made their own observations and run experiments with the aid of enhanced attentional skills and the play of the imagination. In principle, then, there is nothing fundamentally incompatible between contemplation and science (Wallace 2007:2).

Wallace proceeds by making the case for the discipline of contemplative science. Yet while Wallace claims to be bringing together two scientific traditions, *Contemplative Science* does not read in any way like a typical scientific work. This is not simply because Wallace is not presenting new research. In a review article, for example, an author might survey a broad range of literature, or even review literature in two distinct but related fields, and then draw a specific set of conclusions and suggestions on the basis of that review: suggesting potentially fruitful areas for future research, noting lacunae in the field, noting whether the data seem especially strong or the models look sufficiently robust, and so on. Such an article would be regarded as a valid contribution to science. But this is not how Wallace proceeds. Instead, Wallace proceeds from the start from firmly held convictions: a rejection of naturalism, scientism, materialism, and what he calls the "idolatries" of the self, of God, the brain, of nature, and of theories. Unfortunately, readers who do not already agree with Wallace are unlikely to be swayed by his rhetoric, since he does not present convincing arguments for rejecting any of these idolatries, and certainly not in scientific terms. It might also strike one as somewhat suspicious that none of the idolatries Wallace critiques are positions associated with Buddhism. Still, even in the area of Buddhism, Wallace does not provide us with evidence of the rigorous first-person science he describes at the outset of the book; he relies instead on appeals to authority and *ex cathedra* assertions. It is possible, of course, that Wallace sees the philosophical positions he advances as the valid contribution of the contemplative traditions. In other words, Wallace may believe that he is making a contribution to science by introducing the research findings of contemplatives. To do this convincingly, however, he would need to pay closer attention to the source traditions and present the basis for such authoritative claims, including reference to the debates and disagreements within those traditions.

If one wished to make the case that Buddhist contemplative techniques represented a kind of first-person science (in an albeit very loose sense of the word), one would want to draw attention to the remarkable varieties of competing theories and practices that make up that tradition, the intense debates that took place, and the way certain practices and views eventually (albeit gradually) emerged over and against others. This would be to present a picture of Buddhism that, in all its messiness, would come closest to the history of science.

As a longtime scholar of the Buddhist traditions, Wallace is very well aware of these debates and divisions. In *Contemplative Science*, however, he deliberate chooses to speak with a single authoritative voice on behalf of "Buddhism" and "Buddhist

52

contemplatives." There are many such instances in the book, but one here will prove illustrative. He writes:

Buddhist contemplatives claim that with the achievement of a highly advanced degree of *samādhi* known as *śamatha*, or meditative quiescence, one gains experiential access to the relative ground state of consciousness known in the Great Perfection (Dzogchen) school of Tibetan Buddhism as the "substrate consciousness" (*ālayavijñāna*). This, they claim, is the individual stream of consciousness from which the psyche and all the physical senses emerge. According to their findings, the psyche is conditioned by the body and its physical interaction with the environment, but it emerges from the substrate consciousness. (Wallace 2007:15-16)

There are several problems with this approach, however, when it comes to providing a basis for contemplative science. Firstly, Wallace does not provide any indications here on how the Buddhists in question discovered such "findings," or why we should trust that their methods or interpretations were sound.⁴ Even more importantly, he does not acknowledge that large sections of the Buddhist world would reject the account he just presented. While certain schools of Buddhism accept the presence of what Wallace calls the "substrate consciousness," such a term is not accepted by the Theravādan tradition or even certain Tibetan Buddhist traditions.⁵ To be fair, Wallace

⁴ Indeed, in an interview with the publication *Salon*, Wallace admits as much, saying: "could there be this continuum of substrate consciousness that's not contingent upon molecules? From the Buddhist perspective, yes. But again, this frankly sounds like one more system of belief." (Paulson, 2006).

⁵ Wallace is drawing his understanding of the *ālayavijñāna* (Tib. *kun gzhi rnam shes*) from the Dzogchen tradition. A good exploration of how this does and does not relate to other Tibetan systems of thought exists in Pettit (1999), specifically his section exploring

puts forth his claims regarding the substrate consciousness as a "hypothesis" that can be verified by each individual person through their own meditative practice (Wallace, 2007:16). What this leaves unresolved, however, is the question of why different contemplatives would reach different conclusions regarding the existence, or lack thereof, of the substrate consciousness. If the proposed methodology is first-person engagement with meditative practice, yet this methodology yields different results with different people, it is not clear how such a process could be seen as a rigorous methodology analogous to, or resulting in, science. It is worth noting that Wallace's univocal approach is not required in order to bring aspects of the Buddhist tradition into dialogue with modern science. For example, Dunne (2015) notes that approaches such as Wallace's, which seek to present the tradition as univocal, employ a "rhetoric of authenticity" oriented towards providing "*the* true account" (my emphasis) when examination reveals that there are often multiple accounts.

Wallace's approach is also hampered by what can come across as an intensely skeptical view of science, at times verging on caricature. Instead of reviewing the work of scientists themselves for their merits and demerits, which would be enlightening, he makes the argument vaguely, turning to Charles Taylor, a philosopher:

Taylor presents four attributes that are generally believed to be true of objects of scientific study: the object of study is to be taken "absolutely," that is, not in its meaning for us or any other subject, but as it is on its own ("objectively"); the object is what it is, independent of any descriptions or

the relationship between Mipham's presentation of Dzogchen and Tsongkhapa's text *Eight Great Difficult Points (dKa' ba'i gnad chen po brgyad)*. The first of these eight points is specifically the refutation of even the conventional existence of the *ālayavijñāna* (Pettit, 1999:128-130).

interpretations offered of it by any subjects; the object can in principle be explicitly described; and the object can in principle be described without reference to its surroundings...Taylor warns that by allowing scientific inquiry to dominate our worldview, "the world loses altogether its spiritual contour, nothing is worth doing, the fear is of a terrifying emptiness, a kind of vertigo, or even a fracturing of our world and body-space." (2008:156)

It is not clear why Taylor reaches the conclusion that science takes its object of study "absolutely." If Taylor (and Wallace, in quoting him) means the individual objects of scientific inquiry, then it seems hard to support such a view. Taylor and Wallace appear to be accusing scientists of falling into an essentialist error, positing that the objects they study are independent entities, or that they have underlying features that can be distinguished from accidental ones. While this certainly takes place in science, it is also a target for critique by other scientists. For example, later in this work we will examine current theories on emotions in psychology. One aspect of the debate is precisely whether an emotion is an irreducible process (hardly anyone researching the issue would call it an "object," I think) or whether it involves processes that are not unique to emotional processing; this is a question about essentialism and irreducibility. But this debate would be impossible if the scientists approached their object of study "absolutely."⁶

⁶ Holistic, ecological, chaos theory, quantum theory, and dynamic systems approaches in science also tend to reject or at least problematize the type of reductive absolutism that Wallace is here equating with all of modern science, as does the work of those scientists who argue for "complexity" in science (an alternative to reductionism). Examples include Goodwin (2001) on complexity in evolution. Wallace himself participated in a dialogue

What Taylor and Wallace seem to be missing is that the reason for either stance in such cases is essentially pragmatic. How one divides an object of study, whether it is an emotion or anything else, is a strategy which will either pay off in the construction of an abstract model that has greater predictive value, or not. If that is what ultimately drives how the objects of study themselves are understood, it is not at all clear why they would conclude that science takes its object of study "absolutely." This seems nothing more than a straw man attack on science. It is entirely possible that scientists could go beyond science and makes claims that were absolute about their objects of study, and it is obvious that this does in fact happen. Perhaps the most famous example of this in recent times is Stephen Hawking prognosticating at the conclusion of A Brief History of Time that through the advances of physics we will one day "know the mind of God" (Hawking, 1998). But such claims are not scientific and should not be treated as such within scientific communities. Neither Taylor nor Wallace, however, is making an argument against scientism here, or a particular metaphysical position, but rather against science itself.

Wallace further paraphrases Taylor as saying that regarding human identity, the ideal of modern science is that of a

disengaged self, capable of objectifying not only the surrounding world but also his own emotions and inclination, fears and compulsions, and achieving thereby a kind of distance and self-possession which allows him to act "rationally." But the danger of objectifying the self in this manner is

with scientists that resulted in the book *The New Physics and Cosmology: Dialogues* with the Dalai Lama (Zajonc, 2004), so it curious why he is not more nuanced in his account of science in this and other works.

that we may strip our own sense of identity from its qualitative characteristics, which define ourselves as human agents. And the result is that we damage our sense of personhood, especially when the self is reduced to biological processes in the brain. Our sense of meaning comes in part through putting our experience into words, so "discovering" the nature of ourselves and reality at large depends on, is interwoven with, "inventing" the world we inhabit. (Wallace, 2008:156)

Again, this passage that begins with an assumption about how a scientist is supposed to engage in his or her work (disengaged, objectified, stripped of a sense of identity), makes a sudden jump to reducing the self to biological processes in the brain, and then ends with the scientist somehow (perhaps as a result of "damaged personhood") unable to put his or her experience into words, and thereby being unable to discover his or her nature and reality. Fortunately, it is unlikely that many scientists live up to this "ideal of modern science" that Taylor describes, and that Wallace seems to accept as representative.

It is perhaps unsurprising, then, that Wallace envisions a contemplative science in which science (and modern culture in general) is utterly transformed by its encounter with Buddhism, while Buddhism is left relatively unscathed. Through Buddhism, in fact, mind and consciousness can re-enter the scientific picture, in a transformative way. There is a universalism that comes through strongly in Wallace's writings, but it is not a universalism grounded on modern science; rather, it is a universalism grounded on Wallace's own understanding of Buddhism (and scaffolded by a hand-picked variety of sources from other philosophical and religious traditions) and his own understanding of

57

the deficiencies of what he perceives to be the contemporary scientific world view. One gets the impression that modern science is merely along for the ride in Wallace's account: it should get with the program, and once it does, all will be for the better.

Slingerland: Replacing the Humanities

Virtually the opposite view is presented by Edward Slingerland in his book *What* Science Offers the Humanities (Slingerland, 2008a). One of the main positions that Wallace aims to critique through his works, namely the idolatry of the brain, is one that Slingerland explicitly endorses. In a later work, Wallace (2008:5) writes, "many neuroscientists have come to the conclusion that the mind is really the brain... In the final analysis, human beings are biologically programmed robots, implying that we have essentially no more freedom of will than any other automata. Our programs are simply more complex than those of man-made machines." Slingerland has no problem coming out and saying that the mind is nothing other than the brain, and that humans are, in fact, "robots" (2008a, 2008c). Furthermore, it is not modern science, but the humanities, who are in need of reformation in Slingerland's view. A humanities and religious studies scholar himself, Slingerland contends that humanities scholars who ignore the cognitive sciences are like birds "descending from some explanatory cuckoo-land, magically hovering above the mundane world of causality," and moreover, "the place of the humanities in the larger world of human knowledge is a bit like that of present-day North Korea" (Slingerland 2008c: 299-300). Nevertheless, despite their differences, Slingerland and Wallace actually employ the same method to reach diametrically opposed conclusions, as we shall see. This in itself should give us pause.

Slingerland's main thesis is that contemporary work in the cognitive sciences, above all work in the area of embodied cognition, has much to offer the humanities and religious studies in particular. He rightly critiques a tendency in the humanities and in religious studies to ignore cross-culturally shared commonalities in human experience that are rooted in our common embodiment in favor of focusing on difference or even promoting the idea of incommensurability. Slingerland rightly notes that humanities scholars will readily admit that humans do share biological commonalities, but that they draw the line when these commonalities are said to extend into the area of mind and culture. He writes:

Neither postmodernism nor existentialism would deny human physical commonalities. What they *do* deny, though, is the existence of human commonalities at the level of meaning—human bodies as inert physical objects may be subject to a common set of laws, but this has little to do with the lived world of human significance. It is this latter world that is culturally constructed... and despite vague animal preferences for cereal over cardboard or cherries over stones, it is this constructed world of human mediated experience that is all that we are really in touch with. (2008:381)

There is no doubt that work in grounded cognition is doing much to wear away the mind/body divide that has been a feature of scholarship for a very long time. I also agree with Slingerland when he notes that humanities scholars would have much to learn and gain from further encounters with scientists working in the area of grounded cognition, and that the exchange would in fact be mutually beneficial.

59

Unfortunately for Slingerland, his work falls into the same category as Wallace's, namely that of a non-scientist employing a partial survey of the scientific literature to further not a scientific goal, but a philosophical agenda. I should make it clear that what I am objecting to is not non-scientists writing about science: that would in any case raise the thorny issue of how one defines a scientist. What I am objecting to is using scientific findings in a non-scientific way. Admittedly, this is something that, most unfortunately, happens all the time in popular culture, but it should certainly be avoided in serious scholarship. Although the positions Slingerland seeks to advance are generally opposite to those of Wallace, they are buttressed in the same way. For example, Slingerland writes, "Unless one is willing to take refuge in strong Platonism or Cartesianism and embrace the existence of an autonomous 'Ghost in the Machine,' the mind is the body, and the body is the mind" (2008c:8). Elsewhere he calls the "thoroughly materialist view of the self" as the only choice once we give up "our belief in a Cartesian ghost in the machine-of believing, to put a finger point on it, in magic." He then writes, "Unless we are prepared to invoke supernatural belief, it is hard to avoid the conclusion we are 'little robots' all the way down" (2008a:383-4).

Why is it so hard for Slingerland to entertain the belief that there may be an alternative to a thoroughly materialist view of the self? It is because he equates the only other alternative with Cartesianism, and not just Cartesianism. In fact, throughout his works (Slingerland, 2008a, 2008c) he repeatedly lumps a collection of concepts together, suggesting that believing that conscious states are something more than just the firing of neurons automatically necessitate a belief in Cartesian dualism, ghosts, the supernatural, God, and an immortal soul. Slingerland is not alone in doing so. Crick (1995) and

Dennett (1991) have done the same. These authors reject a constellation of things that they group together: consciousness, soul, disembodied mind, divine beings, and supernatural action. It is clear where the object of their critique comes from, namely a view of religion predominated by the three monotheistic traditions of Christianity, Islam and Judaism. But it is not at all clear why these various phenomena (or postulated phenomena) should in fact be grouped together. Without understanding this process of conflation, it is hard to understand why Slingerland can so easily slide from a discussion about the nature of consciousness to a rejection of souls; the relationship between the two concepts is never elucidated. Similarly, it is hard to understand why Pascal Boyer (2001) believes that an evolutionary psychological account for belief in supernatural beings "explains" all of religion.

It is perhaps not surprising that this background assumption would be found. In the west, science has had to contend with religion at numerous points, and the religion in question has most often been Christianity, whether it be the famous case of Galileo Galilei or more contemporary examples such as the creationism vs. evolution controversies.⁷ In Christianity, accounting for divine action is a serious philosophical problem. Most (but not all) Christian theologies posit a God that is not contingent on the material universe, but who can nevertheless act upon it. Even in theologies such as process theology, where God is not omnipotent, God still exerts a power of "persuasion" that would appear to go beyond the ordinary, mechanical workings of the material universe (Suchocki, 1982).

⁷ Consider, for example, the recent critiques of religion by scientists such as Richard Dawkins (2008), which concentrate heavily on theistic religions and especially Christianity.

This crystalizes a question at the heart of Christianity—divine action. Either, on the one hand, everything happens according to the will of a divine God, who moves in mysterious ways and whose ways therefore cannot be known or predicted, which means that trying to influence the world is a sign of hubris, or magic; or, on the other hand, everything happens according to natural laws, in which case these laws can be studied and known, and that knowledge can then be used to effect changes in the world, which is the perspective of science (Lozano-Gotor, 2013). Although one might think that science rejects out of hand immaterial entities as possible causal factors (such as "supernatural" factors like divine action), this is not in fact true, since scientists have posited a variety of entities that are not observable (ether, for example), some of which have later been rejected as non-existent. Contrary to the positions adopted by Slingerland, Boyer, and others, there is nothing in science *per se* that rules out the possibility of developing models that postulate what they might consider "supernatural" entities. Of course, once accepted as having predictive value, those very entities would likely no longer be considered "supernatural" any more by those same authors. This is part of the slippery position that materialists committed to empiricism must maintain, as van Fraassen (2002) points out, since our empirically-based knowledge about both the nature of matter and the extent of the material world is not complete.

Ultimately, however, the argument that Slingerland, Crick and Boyer construct, by lumping all these "supernatural" phenomena together, is a straw man argument. It is possible to reject materialism without succumbing to either Cartesian dualism or an appeal to God or souls (for examples, see Nagel, 2012; Ozawa-de Silva and Ozawa-de Silva, 2011; Thompson & Varela, 2001; Varela et al., 1991). Slingerland does not show great awareness of either the many alternatives *to* materialism, or the many varieties *of* materialism (Churchland, 1988). For example, he appears to simultaneously reject and embrace eliminative materialism (Slingerland, 2008a), and ultimately his conclusion is to explicitly suggest that we hold what he himself calls two contradictory positions at once: that we are robots, and that we cannot ever fully embrace our robot-ness. He likens this to the Buddhist "two truths," an unfortunate analogy that Cho and Squire (2008) expose as unsatisfying.

One of the problems of taking what has been discovered either through the "contemplative science" that Wallace points to, or the modern cognitive and neuroscience that Slingerland draws from, and turning it into philosophical truth, is that one is moving from an empirical stance to a metaphysical one. Both Wallace and Slingerland do this, although neither draws attention to the fact. But there is a natural and likely unavoidable tension between empiricism and metaphysics, drawn out quite well and in good detail by van Fraassen (2002). Interestingly, Wallace (2008) references van Fraassen, but applies his approach only to modern science, whereas in reality it is equally applicable to the "truths" discovered by the contemplative traditions that Wallace relies upon. Van Fraassen writes:

Could I rationally become someone who takes our current theories of how we function in the world to be radically mistaken? ... The sorts of change described as conceptual revolution will take their place in the category of serious error to be avoided, with prescriptions for how to avoid it... Writers on naturalism... take resting one's epistemology on the currently accepted scientific world picture to be what is rational, let alone scientific

63
or intellectually respectable.... But at every historical moment the current such epistemology will classify certain future conceptual revolutions under the heading of pathology—and no such epistemology will survive those revolutions if they occur. In other words, this sort of epistemology fails to give us a view of knowledge that is invariant under such transformations.... (2002:80)

Van Fraassen notes that it will not do any good to just say that an objectifying epistemology holds a particular theory merely as a working hypothesis:

...for the point is then that he or she is imagining the falsity of that theory and is concurrently classified by that theory as someone whose opinion is either incorrect or incomplete.... [T]he philosopher engaged in objectifying epistemology must face a choice: either to become an empirical scientist... and to forsake the greater traditional ambitions of epistemology—or else be content with an epistemology that fails on the touchstone of leaving room for radical scientific and conceptual revolutions in certain areas. (2002:80-81)

It seems that both Wallace and Slingerland have made the jump from empirical science to epistemology, and this not surprising, since the background they have is in philosophy, as humanists, and not as scientists. It is not rare for scientists to be naturalists, or to be religious, or to hold to specific philosophical positions and conclusions that extend far beyond the reaches of their experiments. It *is* rare for them to argue for such in a lengthy monograph, and it would be even rarer for them (or anyone else) to consider it a work of science. Stephen Hawking may pronounce on atheism, as may Richard Dawkins,

but when they do so, they are not speaking the language of science, for there is nothing in their scientific work that in any way justifies their claims. For example, one would not imagine them submitting such comments to peer-reviewed scientific journals.

The question of universalism is not new to the field of religious studies, and is not principally what sets apart the work of Slingerland, Wallace, Boyer and others (such as Barrett (2004) and McCauley(2002)), who bring research in cognitive science to bear on the study of religion. Recently, such universalistic accounts of religion have fallen out of fashion, in favor of positions on the far end of the universalist-particularist divide, such as that of J.Z. Smith (1982), for whom "religion" is merely a construct of religious studies scholars and not at all something that one would universally find out in the world if one were not looking for it or constructing it. Cognitive scientists of religion, such as Boyer and Barrett, fall back on the earliest definitions of religion posited at the very beginnings of the field, such as belief in supernatural beings. As Laidlaw (2007:220) notes:

The phenomena under discussion here are, it is convincingly claimed, so widespread in human populations because their causes—evolved mechanisms of cognitive architecture—are universal to humans. Thus they are to be seen, albeit in locally variable forms, everywhere. But if they are indeed very widely distributed across societies, and of incontestable importance, they do not come near to constituting all that we might reasonably call religion. This fact is partly disguised by, and possibly also from, practitioners of the cognitive science of religion by the virtually unanimous agreement among them in defining religion as beliefs and practices relating to spiritual or supernatural beings.

The current state of cognitive science of religion can therefore account for some aspects of the lives of religious people, but by restricting itself to belief in supernatural agents, it misses much of what is considered essential in traditions like Jainism and Buddhism, such as concepts like "disgust with the world," shame, compassion, and so on. To cite Laidlaw again (2007:224):

If one thing religious traditions do is to propose strongly evaluative psychological concepts, another is to embody practices through which the qualities they describe are variously cultivated, elicited, and enforced. The reflective process of understanding and articulating one's experience in terms of these emotions, motivations, and qualities of character is never just to describe but always also to evaluate, and thus to affect. In understanding and articulating our experience in such terms, we necessarily act upon the self, because we ascribe not only content but import to the emotions or motivations or qualities of character so described.

Cognitive science of religion, therefore, at least as exemplified by Boyer, Barrett, McCauley and others, does not study religion at all per se, at least not as understood in religious studies, but particular types of counterintuitive beliefs. Moreover, if cognitive science of religion limits itself to individual psychology it misses the intersubjective, institutional, and practice-oriented aspects of religious life, which religious studies scholars from the very beginning sought to investigate. Furthermore, by reducing religion to belief in the supernatural, cognitive science of religion fails to acknowledge the way religious studies itself has come to understand religion as a constructed category, rather than a "natural kind" out there in the world.

I think we can conclude from our investigation of Slingerland and Wallace's work, however, that the chief problem they run into is not that universalism that has fallen out of favor within religious studies, but rather the imposition of a world-view onto the field of religious studies that is neither warranted by work within religious studies itself, nor by the traditions from which they supposedly draw authority (science in the case of Slingerland, and Buddhism or "the world's ancient contemplative traditions" in the case of Wallace). This results in a limitation in their scholarship. Moreover, the current state of the field of cognitive science of religion is also limited by the fact that it ignores much of the existing scholarship in religious studies in favor of a very restrictive approach towards particular types of beliefs, often unmoored from the larger contexts in which religious studies scholars would approach those beliefs. It is neither reductionism nor universalism that we should fear when it comes to the interdisciplinary (and scientific) study of religion, but rather problems that are just as important to watch out for in any kind of scholarship, be it in the sciences or in the humanities: overdrawn conclusions that are based not on evidence but on pre-established philosophical positions, partial and potentially biased interpretation of research, and partial presentation and knowledge of the literature in the fields in question.

Proudfoot: Reductionism and Experience

The preceding section touched in some ways on the problem of reductionism. A more sustained examination is necessary, however, because in the study of religion

"reductionism" has become a dirty word for many. It most typically functions as a kind of conversation stopper to dismiss a work, a whole body of work, or even an entire methodological approach. Given the interdisciplinary nature of the contemplative science project, and especially the fact that it bridges the humanities-sciences divide, the problem of reductionism is one that must be critically assessed and addressed if progress is to be made on a firm foundation.

It is important to acknowledge at the outset that much scholarship, even in the humanities and fields like religious studies and cultural anthropology, is aimed at one form of reduction or another. The very point of reduction is explanatory and predictive power, and few scholars are happy to give up entirely on those objectives, at least in a general sense. Secondly, a small number of figures within the field of religious studies have been paying more direct attention to the specter of reductionism, and virtually all of them agree that reductionism of some sort is not only unavoidable, but necessary (see McCutcheon, 2006). The imprecation of "reductionism" is most typically leveled by humanities scholars at social scientists, psychologists, biological anthropologists and others who approach the study of religion using scientific approaches. Nevertheless, the complete "irreducibility" of religious topics is something that most humanities scholars would want to avoid, for reasons we will explore below.

A more nuanced approach is therefore necessary in approaching the question of reductionism. First, we must ask what reductionism is and how types of reductionism differ from one another. This will show us that certain forms of reductionism are not only acceptable, but in fact expected, within religious studies, while others are problematic. Second, we must ask what religious studies scholars are trying to protect or cordon off when warding off the perceived threat of reductionism. I will argue charitably that it is not their own professional interests that are at stake (although this could conceivably be the case), but rather that they perceive that something else important will be lost if reductionism is allowed to have full sway.

In a series of related articles that have appeared over the past several years in the *Journal of the American Academy of Religion*, McCutcheon (2006), Slingerland (2008a, 2008b, 2008c), and Cho and Squire (2008), despite holding otherwise very different views, all agree on one point: reductionism is not, by itself, anything to fear; on the contrary, it is essential in the study of religion. Slingerland (2008c:375-376) calls reductionism an "empty term of abuse" and agrees with McCutcheon's position that any interesting work of scholarship will involve explanatory reduction, in Proudfoot's sense of the term. Cho and Squire (2008:412) go even further, stating that "all meaning making is intrinsically reductive." Since all these authors point back to Proudfoot's usage of the term, let us begin by turning to the original source, before coming back to look at the more recent exchanges between these scholars and what light they throw on the question at hand.

In examining the question of reductionism as it relates to religious experience, Proudfoot (1985) attempts to set a very clear demarcation between "description" and "explanation." The former, he argues, must proceed along lines that are recognizable to the person having the religious experience, ascribing only concepts and beliefs that are familiar to that person. Proudfoot is here following a line laid out earlier by Wilfred Cantwell Smith (1959), who wrote that "no statement of a religion is valid unless it can be acknowledged by that religion's believers" (quoted in Slingerland 2008c:376). He deviates from Smith, however, in allowing this dictum to apply only to "description" and not to "explanation." Citing two examples from William James's (1936) *Varieties of Religious Experience*, Proudfoot writes of a report by Bradley of a vision of Christ, and argues that as a description of an experience, it cannot be reduced:

One might try to separate the description of the core experience from its interpretation and to argue that only the interpretation is specifically Christian. But if the references to the Savior, the Sabbath, and God are eliminated from Bradley's report, we are left with something other than his experience. After deleting references to Christian concepts, we have a vision of a human shape with arms extended saying, "Come." Is this any less informed by Christian beliefs and doctrines than was the original experience? Surely the vision of a person with outstretched arms is not some universal archetype onto which Bradley has added an interpretation in Christian terms. (1985:194)

Several points can already be made here. First, Proudfoot rejects the idea that the description can be separated from the interpretation such that only the latter is "Christian." It is not that Bradley has an experience that he then interprets as Christian; for Proudfoot, the original experience is already "Christian," because it is "informed by Christian beliefs and doctrines." This leads Proudfoot to reject out of hand also the possibility of a universal archetype (the figure with outstretched hands) which might have been interpreted in a Christian way.

On the surface, we may find nothing wrong with Proudfoot's assertions. But there are some serious consequences for taking such a stance. Since Proudfoot is rejecting the

idea that there is a non-Christian experience that is later interpreted in Christian terms, it might appear that Proudfoot is suggesting that the experience is inherently Christian from the beginning. This deviates strongly from the approach taken in Ann Taves's (2009) work *Religious Experience Reconsidered*, which builds off of, but diverges from, Proudfoot's earlier work. Taves is interested in shifting the conversation away from "religious experiences" to "experiences deemed religious." She employs the example of sleep paralysis, which can now be explained in scientific terms and has been reported across a variety of cultures, being "deemed religious" by various religious groups, such as Mormons (Taves, 2009; Proudfoot, 2010:309). In doing so, Taves is engaging in a type of reductionism, and an apparently valid one. Through a better scientific understanding of the phenomena, sleep paralysis need no longer be seen as an inherently religious experience, but can now be seen as an experience that is, in certain contexts, "deemed religious."

Proudfoot, however, notes that while he agrees in general with Taves's approach, "the problem... is that anything, or almost anything, may or may not be considered religious" (Proudfoot, 2010:309). Moreover, Proudfoot's acceptance of the idea of religious experience as "experience deemed religious" suggests that he does not see the Bradley example he provides as an example of an inherently religious experience. He navigates a line between that position and Taves's, writing: "I think that the distinguishing mark of an experience deemed religious is its being deemed religious" (Proudfoot, 2010:309).

The difference here is a subtle one. It is possible to see experiences such as sleep paralysis in a way such that the distinguishing mark is the underlying physiological process, even if, for some communities, that experience ends up being deemed religious. For Proudfoot, if and when that experience is deemed religious, "the distinguishing mark" (not "a" distinguishing mark) of the experience is that it was deemed religious. Interestingly, he does not seem to care whether the subject of the experience itself sees that feature as "the distinguishing mark"; rather, it appears to be his own interest as a scholar of religion that makes the determination. In fact, it does not even appear that important to him that the subjects themselves deem the experience as religious, since he writes, "Subjects don't usually describe or explain events or experiences as religious, but in more local terms that the scholar deems 'religious or religion-like.' Both subject and scholar are doing the deeming" (Proudfoot, 2010:309).

This position, however, seems to contradict Proudfoot's own position in the long quote above, where it is the subject's "Christian beliefs" that render the experience irrevocably Christian. If it is, in fact, the scholar's determination—the scholar's "deeming"—that is most important, then Proudfoot's argument seems to fall apart, since the scholar's determination could never be seen as inseparable from the subject's "core experience."

There are other problems with Proudfoot's account. He rejects out of hand the possibility of a universal archetype: in this case, the man with outstretched arms saying "Come." He provides no justification in the main text for this rejection, apparently finding it self-evident, but he does provide an endnote, which states, "Eliade assumes the existence of archetypal patterns that are given different interpretations in different cultures... The identification of such patterns is highly arbitrary, however, and encourages the scholar to ignore the contextual details of religious experience"

(Proudfoot, 1985:247). Proudfoot does not explain why he determines Eliade's patterns to be arbitrary. Moreover, in a discussion of reductionism, claiming that such patterns encourage one to ignore "contextual details" is not a strong objection, since the value of a reductionist account is precisely that it identifies a key mechanism or feature that can be separated from contextual details less relevant to the question at hand.

Since the time of Proudfoot's writing, the suggestion that a figure with outstretched arms saying "Come"-even shorn of specific Christian beliefs-could trigger a cross-cultural response has become far less outlandish. One could provide numerous examples of humanoid figures with outstretched or inviting arms gesturing "Come" that may incite emotional responses in those who see them, and that they are not "informed by Christian beliefs and doctrines," such as the iconography of the goddess Tārā or the future Buddha Maitreya in the Tibetan tradition, as well as representations of Kannon / Kuan-Yin in Japanese and Chinese Buddhism (see Huntington, 2003, for examples). Although Proudfoot is quite right to say that Eliade may be going too far in calling these "universal archetypes," research in grounded cognition suggests that it is in fact highly likely that certain bodily postures, such as an outstretched palm or outstretched arms, could in fact serve as types of universal symbols triggering feelings of being welcomed, embraced, protected, and so on (Barsalou et al., 2003). This topic will be explored in greater detail in chapter five, which includes a large section on grounded cognition and its implications for contemplative science. Here, however, it is worth pointing out that an account of a simple human figure, bathed in light, with outstretched arms saying "Come" could still be a meaningful description even if shorn of its Christian context, contrary to Proudfoot's claim. There is a middle way between Proudfoot's

rejection of universal archetypes and the claim that descriptions can only be couched in the original religious terminology employed by the person having the experience or a scholar deeming the experience religious.

A further argument against Proudfoot's model comes from his example of a man who sees a tree stump but mistakes it for a bear. He rightly argues that it would not be an appropriate description to say of him that "he was afraid of the tree stump." Let us say that the person in question, however, later goes back to that place and sees it was really a tree stump and not a bear. After that realization, is it still an accurate description of the person's original experience to say that he was afraid of a bear? Even the person himself would not claim this any more. He would no longer say, "I saw a bear and was afraid of the bear, and ran," nor would he accept this as an adequate description of his experience. He would insist that an accurate description would be, "I thought I saw a bear, so I ran," or "I saw a tree stump which I mistook for a bear, so I ran." Note that both are descriptions of the experience and not explanations. In the earlier case, he thought he had experienced seeing a bear, but in the latter case, he realizes he never experienced seeing a bear. In the earlier case, he thought his fear was of a bear; in the latter case, he still can describe his experience of fear, but now it become fear of what he thought was a bear.

This is not an insignificant point, I think, for a few reasons. First of all, the claim Proudfoot is making rests upon a wish to separate out the descriptive account of an experience from any kind of truth claims about the veracity of that experience or what is "really" happening—in other words to draw a very clear demarcating line between "description" and "explanation." The example cited above about the man and the tree stump/bear, however, shows that the demarcation is not so simple: explanatory features

can creep into an original description and then later be excised from that description. This is especially important in a discussion around religious experience, as Taves recognizes in drawing our attention to examples such as sleep paralysis. An original descriptive account of an experience such as sleep paralysis can include religious elements that are later excised when the subject realizes that the experience resulted from a non-religious process. This would be a case of recognizing misattribution. In other words, explanation is already implicated heavily in description, but certain explanations can then be retracted, leaving a different description and a different explanation. This is because if we realize that what we saw earlier was wrong, we do not hold on to some "originary" account of that experience against what we now believe to be the reality; rather we discard the explanatory aspects of the description that we now believe to be erroneous. We can even do this with regard to our feelings: a person might say, after the end of a failed relationship, "I thought it was love at the time, but it wasn't."

The idea of description as being completely separate from explanation may rest on an outdated notion of how memory works (Schacter, 1997). It is highly unlikely that memory is simply a straightforward recall of a previous experience that can then be interpreted, in the way one picks up notes one wrote down earlier and reads them out and then interprets them. Rather, accessing episodic memory would appear to be itself a constructive process; certainly this would appear to be the suggestion of simulation theories in psychology, whereby any recall of categorical knowledge involves a simulation that on a certain level re-creates the experience (Barsalou, 2008, 2010; and for a relevant ethnographic account of the constructive potential of recalling autobiographical memory, see Ozawa-de Silva, 2006).

This point is particularly important for contemplative science. Buddhist traditions stress that the root cause of suffering lies in ignorance (*avidyā*), which typically involves a misperception or distorted cognition (Dunne, 2004:54). For the contemplative process to succeed, it is important that certain features of experiences that were once considered to be intrinsic to them, and therefore which would have been included in any description, are later seen to be erroneous and non-intrinsic. In fact, Buddhist traditions use almost an identical analogy for this process: whereas Proudfoot discusses mistaking a tree stump for a bear, they draw an example from one of the Buddha's sermons where he likens realizing selflessness to a man who discovers that what he thought was a snake is in fact only a rope (for an illustrative interpretive reading, see Gyatso, 2002:139-140). Importantly, once ignorance is removed, not only does one not see the snake (or self) any more, but one also realizes that there never was any actual snake (or self). On Proudfoot's account, a Buddhist practitioner who had the realization of selflessness or emptiness would still have to describe his earlier beliefs in terms of a non-existent self or essence. which would not make sense.

The same would hold true for someone who believed in God, but later came to not believe in God in any more—say, for instance, in the case of Bradley above. Bradley, later becoming convinced that what he saw was not Christ, but simply a vision of a man in light with outstretched arms, would not be able to give a valid description of his own experience, according to Proudfoot's rules. Surely that is an absurd consequence of this line of thinking. Proudfoot (1985:196) writes, "Descriptive reductionism is the failure to identify an emotion, practice, or experience under the description by which the subject identifies it. This is indeed unacceptable. To describe an experience in nonreligious terms

when the subject himself describes it in religious terms is to misidentify the experience, or to attend to another experience altogether." So, either Bradley, upon later abandoning belief in God, must be accused of misidentifying his experience altogether in his new account, or he is actually attending to a different experience now. Either answer creates problems for Proudfoot's model. But if we cannot hold individuals themselves to these constraints, why should scholars be held to them? These problems only become multiplied when we try to describe not only a single individual's "experience" that can change and develop over time, but the experience or experiences of an entire group of individuals (such as the members of a religious tradition) in a way acceptable to that whole group and over time. Who, for example, within the group gets to decide what is acceptable and what is not? These are very real and very thorny questions of power, authority, and legitimacy that Proudfoot and others who uphold this view fail to address. Yet they are central to understanding the social and political ramifications of how descriptive and explanatory accounts of a religious tradition play out when scholars assess religious traditions using terms unfamiliar to them (an example being the reaction, almost twenty years later, to Paul Courtright's (1985) psychoanalytic interpretation of Ganesh, and the outcry this caused among certain Hindu organizations and individuals) (McCutcheon, 2006).

Proudfoot later tries to address this very problem by citing the example of the bear and a friend who points out that it was not really a bear. Here, he clarifies that "Descriptive reduction is inappropriate because the experience must be identified under a description that can be ascribed to the subject *at the time of the experience*" (1985:218, my emphasis). He then says, "In the example given above, my fright was the result of noticing a bear ahead of me." But it is simply not possible to say this. No one, upon learning that there was no bear, would continue to say, "My fright was the result of noticing a bear," because if there was no bear, then there could not possibly have been any "noticing of a bear." It is a violation of common language use to say that although there was no bear, one saw a bear. Moreover, as we have already suggested above, it is impossible to ascribe a description to the subject "at the time of the experience," since the subject only recounts the experience at a later moment, whereupon it is already a reconstruction. The situation might be different if subjects could describe exactly how they were experiencing something as they were experiencing it, or if a later description somehow left an original experience intact and unmodified; neither seems to be true. Ironically, a third-person approach (observation of the person as he or she is undergoing the experience, either visually or using brain imaging, for example) may be the closet we can get to aspects of an experience in real-time as it is occurring rather than as a later reconstruction (although obviously these do not pertain to the purely subjective aspects of the experience, such as qualia). Yet this is the exact opposite of what Proudfoot is proposing.

We should stop here and ask ourselves why Proudfoot would fight so hard to support a position that seems so untenable. It appears that the motivation is to preserve some domain for religious studies that can be protected against reductionism. Explanatory reductionism is clearly important, but Proudfoot is not happy to concede further ground by admitting reductionism into descriptions. By attempting to delineate a domain of "pure" descriptions of experience free from explanatory and interpretive elements, Proudfoot is able to retain a space for religious experience that will remain impervious to reductive analysis.⁸ It will be interesting to see to what extent this tendency emerges in contemplative science. For the present purpose, it is sufficient to say that the strategy Proudfoot employs does not appear the proper way to address this problem.

In general, the very idea of pure description independent of theory (i.e., implicit or explicit explanation) is losing ground in a number of fields, and with good reason. The philosopher Hilary Putnam has made a case that there is no absolute line one can draw between observation and theorizing, since observations are already structured by theories, just as theories are based upon, informed by, and reshaped by observations (Putnam, 1975, 1990). Similarly, cultural anthropologists have called attention to the theory already implicit in supposedly purely descriptive ethnography (with the corresponding emergence of a trend of minimalist documentaries created by visual anthropologists), although very few anthropologists are brave enough to create works in written form that do not rely on at least some passages of explicit theorizing.⁹ One of the areas where this question has been examined with particular interest is the field of phenomenology.

⁸ It is not clear that human beings bracket their experiences and descriptions of them from what they believe to be true, and, moreover, experiences are not fixed once and forever, but fluid in nature. It is interesting that Proudfoot cites Wittgenstein approvingly, even though in the citation, Wittgenstein, who is always attentive to actual human behavior, is explicitly questioning the usefulness of explanation as something set apart from description (1985:210). Also important is the fact that the very term "experience" is very complex; Proudfoot is clearly connecting it here to what can be consciously recalled and described in explicit concepts and beliefs by an individual, whereas cognitive psychology has powerfully illustrated the vast power of unconscious processing that occurs in response to "experiences" of stimuli, many of which cannot be consciously recalled but nevertheless influence cognition and behavior. Proudfoot highly privileges conscious recollection and processing, but does not provide any grounds for doing so; therefore, what he calls "experience" seems to be an already highly processed and reconstructed form of experience. The actual relationship between description and explanation therefore seems much more complicated and interdependent than the clear division set forth in his model.

⁹ See Hastrup (1995), who goes so far as to say, "Characteristically, anthropology in the past decade has largely renounced theory" (Hastrup, 1995:5).

Phenomenologists differ with regard to the role that interpretation and prior theoretical orientation influences experience and subsequent description of that experience. While some, such as Zahavi (2008), argue that direct perception is possible, Heidegger (2008) and those following him argue for an interpretive phenomenology, whereby perceptions are already shaped and influenced by the subjectivity of the perceiver, and cannot be understood outside of that context. This argument will resurface later, in chapter five, when we turn to the question of phenomenology and how it relates to *Lojong* practice in some detail.

By distinguishing explanatory reductionism from descriptive reductionism, Proudfoot set out to create a space where scholars could engage in the analytical process of reduction while maintaining a *cordon sanitaire* around descriptions of religious experience, which would still be the prerogative of the individuals having those experiences, and which would therefore need to be couched in terms intelligible and recognizable to such individuals. He wants to create a happy medium that protects the self-evident nature of religious experience to the religious in-group, while at the same time creating room for scholarly activity among a (potentially) out-group.

A separation of description and explanation effectively serves to insulate a subjective experience and its truth content (either for the scholar or even for the individual himself). This is a break that is often employed both in religious studies and disciplines like cultural anthropology to shield accounts of experience from thorny questions about "truth," "reality," "science," and so on; a break that is often only problematized when the accounts deal with large-scale violence or situations in modern societies, where the historical accuracy of accounts raises its ugly head (Van Den

Bouwhuijsen, 2005; Wilson, 2004). If one accepts that the achievement of a purely objective account of reality is impossible, it is easy to fall back onto a model of reality whereby each individual or group has their own "reality," "what is real for them." If a particular religious group believes in voodoo or witchcraft, it is deemed nonsensical for cultural anthropologists to question whether voodoo actually works or not, and if so how; the question rather is to understand the reality *as experienced* by the members of that group, and to treat that reality as if it were the only reality that mattered. This has an effect on the discipline (both in religious studies and in cultural anthropology) of moving away from universalist claims about "reality" in general to focusing on particular cultural-linguistic groups and treating them as if they existed on islands set apart from the rest of the world. Disciplines such as psychology and neuroscience, however, attend far less on the whole to cultural, linguistic and religious differences, in that they look for cross-cutting patterns. Since the field of contemplative science brings both approaches together, this is a problem that will need to be addressed. Furthermore, since contemplative science connects closely with religious practices, there will likely be an impetus to try to acknowledge two, perhaps at times irreconcilable desiderata: reductive, analytical explanations, on the one hand, and context- and belief-sensitive descriptions considered to be "true" by spiritual practitioners and communities.

An account of another people that seeks to explain their behaviors in terms that are alien to them, particularly when that account is backed by institutional authority and resources, creates the dangerous combination of an imposition of a reality-shaping narrative coupled with a power imbalance. No one likes to have their own reality described by outsiders in terms they do not understand, and that may not sound at all true to their own experience. Said's *Orientalism* (1978) is one of the more famous investigations of this, but it is a question that has haunted cultural anthropology since its beginnings, and that has even prompted some anthropologists to question whether the discipline can ever overcome its colonialist past (cf. Asad, 1991; Van Den Bouwhuijsen et al., 2005). This is a reality that must be addressed in pluralistic societies and in an increasingly globalized world. Given the imbalance in institutional weight, cultural authority and economic power between the scientific communities in modern societies and the institutions that maintain contemplative traditions, such as the Tibetan Buddhist traditions, this is a very real and significant concern. At present, those scientists who engage personally in dialogues with Tibetan Buddhist authorities such as the Dalai Lama, show great respect and consideration for traditional accounts, as exhibited in several of the published volumes of transcripts of Mind and Life Institute dialogues between the two sides (Goleman, 2003), but it is not clear that this trend will continue as contemplative science grows and becomes more mainstream.

Despite respect for the accounts of individuals and practice communities, the approach of contemplative science must recognize that we have very good reasons to doubt self-report as a reliable methodological approach. In fact, across the psychological and social sciences increasingly sophisticated measures have been developed to get around self-report. Both anthropologists and psychologists have developed a long history of doubting the accounts that informants give of themselves and their own actions, and although some of this has crept into the humanistic study of religion, much of it has not. Already in 1977, Nisbett and Wilson described the problem of "confabulation," namely coming up with plausible stories despite having insufficient evidence for them. They wrote that subjects are sometimes (a) unaware of the existence of a stimulus that importantly influenced a response, (b) unaware of the existence of the response, and (c) unaware that the stimulus has affected the response, and therefore:

when people attempt to report on their cognitive processes, that is, on the processes mediating the effects of a stimulus on a response, they do not do so on the basis of any true introspection. Instead, their reports are based on a priori, implicit causal theories, or judgments about the extent to which a particular stimulus is a plausible cause for a given response (Nisbett and Wilson, 1977).

Recent neuroscientific research on patients with brain damage further casts doubt on the accounts individuals give for the choices they make. Gazzaniga's (2005) work on split-brain patients demonstrates that patients report reasons for engaging in actions and making decisions that could not be true, given experimental conditions. Gazzaniga proposes that the left brain houses the main components of people's ability to interpret their own and others' behavior and mental states as well as inferences. In his experiments with split-brain patients, patients were shown two pictures simultaneously, one to each hemisphere, and then had to choose from a set of other pictures those which matched the original pair most closely. One subject saw a picture of a chicken claw flashed to his left hemisphere and a snow scene flashed to his right hemisphere. He then chose a shovel with his left hand (controlled by the right hemisphere) and a chicken with his right hand (controlled by the left hemisphere). He later explained his choices by saying that the chicken claw went with the chicken, and the shovel was needed to clean out the chicken shed, ignoring the stimulus of the snow scene. Gazzaniga argues that although the subject's choice was influenced by his right hemisphere seeing the snow scene, this information was unavailable to his left hemisphere, which had to interpret the choice according to the information it had (the chicken) and did so accordingly. Research in this area continues, with some (Carruthers, 2009) continuing to maintain that introspection (as a process which deserves any kind of special status or privileging) is ultimately untenable, and others (Fiala and Nichols, 2009) arguing that while confabulation certainly does take place, subjects show greater hesitancy when confabulating than when introspecting.

Secular Ethics

Thus far we have examined a few approaches relevant to the development of a contemplative science, most notably those of Wallace and Slingerland, and we have also examined the question of reductionism, an issue that no doubt will become even more important as contemplative science begins to take shape. Although I appreciate the work of all the scholars examined thus far, my own analysis up to this point has been largely critical. This is only because I do not see these works as, in themselves, yet providing a sufficient foundation for contemplative science. I do believe, however, that there are approaches that could be more beneficial, more solid, and more sustainable.

One example comes from the present Dalai Lama of Tibet, Ven. Tenzin Gyatso. The Dalai Lama has engaged in numerous debates with scientists from a range of disciplines in the area that we are here calling contemplative science (e.g. Goleman, 2003). He has only authored one work himself on the topic, entitled *The Universe in a Single Atom* (Gyatso, 2006). What is notable is that this work navigates a happy medium between the approaches of Wallace and Slingerland. In contrast to Slingerland, the Dalai Lama rejects scientific materialism and differentiates strongly between that position, which he considers a metaphysical and philosophical position, and the project of science, which is based on an empirical approach (Gyatso, 2006). At the same time, he gives full respect to science and contends that Buddhist theories that have been rendered obsolete and untenable by scientific advances in knowledge should be abandoned, even by believers. He raises interesting points regarding Buddhist approaches to the study of mind and consciousness, but does not present these positions as "truths" discovered by millennia of contemplative adepts the way Wallace does, but rather as prospects for interesting lines of future research and dialogue.

One of the reasons why the Dalai Lama is able to navigate between these metaphysical extremes is his commitment to a pragmatic approach to science and spirituality, which sees both as "seeking...truth" and as ultimately deriving their purpose from their ability to contribute to human well-being:

I believe that spirituality and science are different but complementary investigative approaches with the same greater goal, of seeking the truth. In this, there is much each may learn from the other, and together they may contribute to expanding the horizon of human knowledge and wisdom. Moreover, through a dialogue between the two disciplines, I hope both science and spirituality may develop to be of better service to the needs and well-being of humanity (Gyatso, 2006).

Such an approach is very helpful in steering contemplative science away from metaphysical quagmires, but it becomes even more powerful when combined with another contribution the Dalai Lama makes, namely his approach to "secular ethics." This approach is mentioned in *The Universe in a Single Atom* (it resonates in the quote above with the words "service to the needs and well-being of humanity"), but it is much more fully elaborated in another of the Dalai Lama's works, namely *Beyond Religion* (Gyatso, 2011).

In *Beyond Religion*, the Dalai Lama ties the project of contemplative science, which he leaves largely to the second half the book, to the idea of "secular ethics," which comprises the first half of the book. "Secular ethics" is the idea of a shared set of values and principles that are based on common sense, common experience, and science, and that are founded on the two "pillars" of our common humanity, rooted in our common wish for happiness and to be free from suffering, and our experience of interdependence (Gyatso, 2011). Beyond Religion and the Dalai Lama's approach to secular ethics in general are of great importance because they tackle head on the question of whether it is possible to establish the project of contemplative science free from the metaphysical assumptions that divide Wallace and Slingerland and that would divide any individuals or communities that do not share the same ideological, religious, or metaphysical positions. Nevertheless, the presentation is made in simple language and without citations, so a reader who merely gives this book a cursory look may not see the positions that the Dalai Lama is taking up vis-à-vis important and well-established debates in philosophy and psychology.

It is helpful, therefore, to elucidate some of those debates here. In a very interesting critique of the idea of "secular ethics," presented in several Op-Ed articles for the *New York Times*, but most notably one entitled "Are There Secular Reasons?" (Fish, 2010), noted literary theorist Stanley Fish contests that secular reasoning alone—

including science and the gathering of empirical evidence—can never yield grounds for ethical decision-making. The argument is a familiar one: data alone cannot yield sufficient grounds for reaching a decision when faced with an ethical dilemma; ultimately one must decide on the basis of values, and those values will be predicated upon a prior metaphysical commitment that itself cannot be justified purely by appealing to other data. He approvingly cites Alasdair McIntyre writing that secular discourse consists "of the now incoherent fragments of a kind of reasoning that made sense under older metaphysical assumptions," and Augustine's observation that "the entailments of reason cannot unfold in the absence of a substantive proposition they did not and could not generate" (Fish, 2010).

This would seem to create an obstacle for the Dalai Lama's attempt to establish a "secular ethics" based on common sense (reason), common experience (empirical observation), and science, rather than religious or ideological belief (Gyatso, 2011). One way out would be if one could provide a "substantive proposition" on the basis of these secular sources that was itself non-metaphysical. Ingeniously, the Dalai Lama does provide such a proposition, and interestingly it is drawn directly from the *Lojong* tradition. Although the proposition appears in many places, here I will quote from the Sakya scholar Gorampa, who writes in his brief *Lojong* text "An Instruction on Parting from the Four Clingings":

Just as I desire happiness, so too do all sentient beings; therefore just as I pursue my own happiness, so must I seek the happiness of all beings. Just as I shun suffering, so too do all sentient beings; therefore just as I

alleviate my own suffering, so must I alleviate the suffering of all beings. Meditate in this manner. (Jinpa 2006:536)

The instruction here is for the purpose of equalizing self and others, a key *Lojong* practice that precedes the practice of exchanging one's own and others' happiness and suffering. This same sentiment appears in numerous *Lojong* texts, and it appears numerous times in the Dalai Lama's work on secular ethics, *Beyond Religion* (Gyatso, 2011). In the first chapter of the book, he enumerates "two pillars for secular ethics," the first of which is "the recognition of our shared humanity and our shared aspiration to happiness and the avoidance of suffering" (Gyatso, 2011:19).

It is perhaps ironic that Fish cites Augustine, since Augustine also accepted as fact that all people desire happiness, although he disagreed with the Epicureans regarding the implications of this fact (Kent, 2001:210-211). What is interesting about the Dalai Lama's claim is that it rests on an appeal to common sense and common experience. Rather than a proposition to be proved or one that must rest upon other claims, it is taken to be self-evident and therefore non-metaphysical. It therefore functions as axiomatic.

The function of the claim is related, yet distinct, in the *Lojong* tradition itself. There, it functions to create a basis for creating a sense of equality and sameness between self and others, but for the Dalai Lama it does this and more, because it also functions as the basis for an entire ethical system. It becomes, in his words, a "pillar" for "secular ethics" (Gyatso, 2011). In the hands of the Dalai Lama, therefore, it does double duty: it is both a way to cultivate compassion, but it is also an axiomatic claim that can serve a philosophical purpose.

We must also note that when it comes to ethics, the Dalai Lama prioritizes a particular dimension. Moral psychologists Graham and Haidt, in numerous publications, have outlined five foundations for morality based on cross-cultural research, the first of which is care/harm (Haidt and Graham, 2007; Graham and Haidt, 2010). These describe dimensions that are called upon as foundational in the moral reasoning and intuitions given by individuals in different cultures and societies. The Dalai Lama centralizes the harm/care dimension of morality as key for secular ethics. Of the other fourjustice/fairness, hierarchy, ingroup, and purity-he either disregards, contextualizes or actively undermines them as proper moral foundations for a secular ethics. Contextualization is the approach he takes for the most important of these other foundations in his eyes: that of justice and fairness. He devotes a chapter of *Beyond Religion* to the topic of justice and fairness, entitled "Compassion and the Question of Justice." Here he acknowledges that some might disagree with his placement of compassion (which reflects the care/harm dimension) as the foundation for secular ethics, writing: "As they see it, the principle of justice or fairness, rather than that of compassion, must underpin any humanistic approach to ethics" (Gyatso, 2011:57). Much of the chapter is devoted to reframing the question of justice so that it aligns with the Dalai Lama's understanding of compassion. He argues for a "broad" conception of justice against a "narrow" one, and concludes by saying, "Indeed, in my understanding the very concept of justice is itself based on compassion" (Gyatso, 2011:70). As for the other categories given by Graham and Haidt, "ingroup" is clearly a moral foundation that is problematic in his eyes, as he argues for a universal compassion that is unbiased and unrestricted. We will see in chapter three how this forms a fundamental dimension of the

cultivation of compassion in the *Lojong* tradition. The dimension of "purity" does not seem to be a proper moral foundation for secular ethics either, and is not mentioned much in the Dalai Lama's writings or speeches. Lastly, "hierarchy," like "ingroup," appears to be undermined in the Dalai Lama's approach by the insistence upon the fundamental equality of all human beings and the corresponding stress on human rights (Gyatso, 2011).

By resting his ethical system on the axiom of the fundamental and universal wish for happiness and to avoid suffering, and by thereby centralizing the harm/care dimension of ethics, the Dalai Lama can then argue that compassion is the fundamental virtue for ethics and well-being. This is because, as we have seen, compassion is the wish to alleviate the suffering of others, which is corollary to wishing that they have happiness. As such, compassion also acts as preventative against inflicting suffering on others. The presence or absence of compassion can therefore be seen as of great ethical importance. Compassion plays a further role also. Since compassion is fundamentally interpersonal and prosocial, it acts as a force to connect human beings together. Research on the relationship between warm relationships and happiness suggests that if compassion strengthens close and warm relationships then this strengthening itself, even apart from the actual alleviation of suffering, would be conducive to happiness (Dehir, 2014). Sahpire-Bernstein and Taylor (2014:821) write, "Social relationships have long been considered one of the strongest and most important predictors of happiness... Empirical evidence that relationships are tied to happiness is plentiful."

In comparison to the other approaches examined here, the Dalai Lama's approach towards contemplative science has the greatest chance of leading to a sound foundation for this new field. There are a few reasons for this. First, it not only navigates between the

metaphysical divide presented by Slingerland and Wallace, but it also provides a constructive way of solving certain challenges related to metaphysics, as presented by Fish. Second, it ties the contemplative science project to ethics. It does so not only in a general way, but by providing a very specific approach to ethics that centralizes the care/harm dimension as a moral foundation, and therefore compassion as the cardinal moral virtue. Since compassion is itself a moral emotion that can be cultivated through contemplative practice, as we shall see, this provides a very powerful connection between secular ethics and contemplative practice on multiple levels. Lastly, the Dalai Lama's approach brings together in an elegant way a number of related fields and areas of study. By showing the relationships between social relationships, happiness, compassion, ethics, contemplative practice, empirical observation and reason, the Dalai Lama provides a way of integrating fields such as psychology (especially social, cognitive, and positive psychology), neuroscience, ethics, and contemplative practice together in a coherent way that can provide the basis for a robust contemplative science. Taken together, *The* Universe in a Single Atom and Beyond Religion constitute a tour de force, and for the reasons given above, in my estimation they stand alongside Varela, Thompson and Rosch's (1991) excellent The Embodied Mind as the most important theoretically foundational works for contemplative science to date.

Contemporary and Traditional Accounts of Mindfulness

The previous sections explored theoretical approaches to the development of contemplative science. For this new area of interdisciplinary inquiry to grow, what is also necessary is an expansion of our understanding of contemplative practices beyond those

currently explored and evaluated in the sciences. While scholarship in fields such as religious studies and anthropology has explored a wide range of religious and contemplative practices, research in the health and cognitive sciences has remained much more narrow. This can be seen in the popularity of "mindfulness" and "mindfulnessbased interventions," and also in the typical reduction of "contemplative practice" to "meditation" (Davis & Hayes, 2011). While this is undoubtedly an important area for study, it represents only a small subset of possible contemplative practices that could be studied—and that need to be studied—if a contemplative science is to truly emerge. The following sections explore how we might expand our understanding of meditation practices around the issue of mindfulness. A further step would then be to address the question of how we might expand our understanding of contemplative practice to go beyond a narrow understanding of meditation. This second step presupposes the first; therefore, I attempt only the first of these two steps, and consider the second to be beyond the scope of this present dissertation, which is focused on meditation and not other forms of contemplative practice. Nevertheless, this is an important area for the future development of contemplative science.

Attention to contemplative practices that focus specifically on the cultivation of compassion is relatively sparse compared to the significant attention that has been garnered by "mindfulness-based interventions" (MBI's), which are often approached as ethically neutral practices. Interestingly, this somewhat narrow approach is considerably out of step with the Dalai Lama's approach to contemplative science as examined in the previous section. There it was shown that for the Dalai Lama, contemplative science is best approached in a way that is connected with the idea of secular ethics. This would

suggest that attention should be paid to the cultivation of the foundational virtue of compassion and other related virtues such as gratitude, forgiveness, and so on. When the Dalai Lama does write about mindfulness in *Beyond Religion*, it is notable that he repeatedly chooses the term "ethical mindfulness" (Gyatso, 2011).

Furthermore, despite the remarkable rise of interest in mindfulness and the interventions that employ and cultivate it, there remains some confusion regarding what mindfulness is and whether it refers to a function of the mind, a single yet universally applicable practice, or a set of specific historically and socially situated practices. As long as this confusion remains, there will also necessarily be confusion with regard to the relationship between mindfulness-based practices and compassion practices. The two cannot be seen as unrelated, especially as mindfulness is listed as a component (often a first component) of contemporary protocols for cultivating compassion, including CBCT and CCT (Negi, n.d.; CCARE, 2009). Another question is the relationship between contemporary uses of the term mindfulness and contemporary mindfulness practices, on the one hand, and traditional Buddhist practices that employ the term mindfulness, including the practices of the *Lojong* tradition.

In his work examining this very topic, Dunne (2015) provides three reasons why it is helpful to ask the question of how contemporary conceptions of mindfulness relate to traditional Buddhist ones. The first is that most contemporary mindfulness-based interventions explicitly cite Buddhist practices as their source and inspiration; the second is that traditional Buddhist accounts may suggest or provide insight into new lines of research; and the third is that Buddhist traditions group practices together coherently in ways that may or may not align with groupings employed by contemporary mindfulnessbased interventions (Dunne, 2015). One might be tempted in such a discussion to simply ask what the "true account" of mindfulness is, according to Buddhist sources. This is not possible, however. Dunne (2015) notes: "to produce some single, authentic and authoritative account of mindfulness in Buddhism, not only must one ignore the diversity of views across Buddhist traditions, one must also ignore the historical development of individual traditions themselves."

There have been several recent attempts to define what "mindfulness" means, with entire articles devoted to addressing the difficulty of defining the term, such as Chiesa (2012). At the heart of the problem is a disjunction between definitions of mindfulness that stem from contemporary mindfulness-based interventions (MBIs), such as Mindfulness-Based Stress Reduction (MBSR), and definitions that stem from traditional Buddhist sources. Definitions that rely on the former (MBIs) tend to define mindfulness as Bishop does, namely "as a kind of nonelaborative, nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in the attentional field is acknowledged and accepted as it is" (Bishop, 2004:232). Definitions that rely on traditional sources are more complex, since these sources are more heterogeneous than contemporary understandings of mindfulness as used in MBI's. They derive from a wide range of Buddhist traditions over long stretches of time, and each of these traditions in turn may have introduced debates and nuances into their understanding of mindfulness. It is typically noted that the word "mindfulness" is used to translate the Pali and Sanskrit terms *sati* and *smrti*, which are also commonly translated as "memory," "recollection," and even "reasoning on moral subjects" and "conscience" (Gethin, 2011). Dunne (2015) has offered a heuristic for approaching these diverse traditions, dividing

them into "classical" and "nondual" traditional accounts. It appears that some of the confusion that arises in reconciling traditional and contemporary accounts of mindfulness arises from the fact that contemporary accounts, such as that presented in MBSR, bear resemblances to both classical and nondual traditions.

If we never find a way of resolving these tensions, certain problems are sure to arise. For example, a recent review article in the journal *Psychotherapy* defines mindfulness as "moment-to-moment awareness of one's experience without judgment," which is a definition that aligns with contemporary, rather than traditional, understandings of mindfulness. The authors then go on to state that "the term mindfulness *meditation* is typically used synonymously with Vipassanā, a form of meditation that derives from Theravada Buddhism," and later describe "Vipassana, Zen and Vajravana" as "three mindfulness meditation styles" (Davis and Hayes, 2011). The authors may be correct that such terms and traditions are conflated in popular usage and even in the scientific literature, but properly they all refer to quite distinct and different things. The term "mindfulness" is not identical to contemporary practices of "mindfulness meditation" like MBSR; nor are these the same as the contemporary Vipassanā movement (built around a specific contemporary meditation practice that bears similarities, but is far from identical, to mindfulness-based interventions like MBSR), or classifications of entire Buddhist traditions such as Zen and Vajrayāna. The latter refer to traditions, or even sets of traditions, that contain a plethora of diverse meditation practices and styles that cannot be subsumed under the category "mindfulness."

The existing confusion about terminology and practices will certainly limit scientific research on the benefits of mindfulness-based and other meditation practices.

Without a clear conceptual understanding and definition of mindfulness, the alleged growing literature on the "scientific benefits" of mindfulness is rendered meaningless. One can understand the wish to link together the benefits of a variety of contemplative practices together under the rubric of a single term, such as "mindfulness," as this renders the findings more uniform and perhaps convincing to a popular audience. As yet, however, we lack a theoretical or an operational model of mindfulness that would allow us to tie together both the diversity of "mindfulness practices" currently being studied scientifically and the variety of traditional accounts of mindfulness found in the Buddhist tradition.

This would not be a problem if contemporary mindfulness practices were seen as being completely original, but this is not the case. Rather, contemporary mindfulness practices receive a considerable amount of their legitimacy from the idea that they are based on a two-and-a-half-thousand year tradition that dates back to the Buddha (Bishop, 2004). To complicate matters further, some contemporary proponents of mindfulness, such as some practitioners of Dialectical Behavioral Therapy (DBT) and Acceptance and Commitment Therapy (ACT), claim that meditation is not necessary for the practice or cultivation of mindfulness (Cashdan and Ciarrochi, 2013), thereby removing the link between mindfulness and meditation altogether.

What this requires then, is a way of conceptualizing the variety of traditional and contemporary accounts such that minimal confusion may arise in discussing mindfulness. This is important, since it is not likely that the term "mindfulness" will go away any time soon, and it is not helpful to simply ignore the problem. It is possible that mindfulness may profitably be understood as a capacity to deploy certain psychological capacities (such as, but not necessarily limited to, working memory) such that they retain either a particular mental object, or a particular mental process, over time, which object or process can then be retained either non-analytically or analytically. If this is true, it may be that the main difference between contemporary mindfulness-based interventions and traditional "classical" explications of mindfulness is that the former represent a subset of the latter, in that they concentrate on particular objects and processes (typically the breath and the present moment, but also often the processes of walking, eating, or other activities), as well as particular styles of analysis or lack of analysis. Classical accounts, on the other hand, work within the assumption that a wide range of objects and processes can be used (death, the uncleanliness of the body, compassion), and that a variety of analytical and non-analytical styles of practice are viable (Goldstein, 2013).

A second point to consider is that when mindfulness takes on certain objects and analytical styles, it becomes more obviously normative. It is in this domain that mindfulness both reflects and affects cultural beliefs, assumptions, norms, and practices, and intersects with what the Dalai Lama calls "secular ethics." Recall that he himself uses the term "ethical mindfulness" in *Beyond Religion* (Gyatso, 2011), which would be a confusing term if we only understood mindfulness as non-judgmental, present-moment awareness. As Dunne (2015) explains, classical mindfulness practices typically involve an analytical, and hence normative, dimension, particularly as the analysis is intended to generate certain specific insights into the nature of reality. They also involve a teleological or formative dimension—either implicit or explicit—whereby the practitioner is clearly understood to be on a trajectory towards becoming a different type of subject—almost always a more ethical subject. These normative dimensions to

mindfulness practices reflect particular cultural outlooks and serve to affect the beliefs and practices of those who engage in such practices, often with the explicit intention of changing those beliefs and practices. Understood on a larger scale, this is often even explicitly equated with a "cultural shift," examples of which are US Representative Tim Ryan's book, *A Mindful Nation* (Ryan, 2013), or in the promotion of "a culture of compassion" by His Holiness the Dalai Lama and others.¹⁰

One avenue that may be profitable to explore is the relationship between the accounts of mindfulness given in classical Buddhist texts and contemporary research on attention and working memory. Working memory is understood as a system that provides temporary storage of information necessary for cognitive tasks including language comprehension, learning and reasoning (Baddeley, 1992). Mindfulness, in traditional classical Buddhist psychological texts such as the *Abhidharmasamuccaya*, is defined as not losing (i.e., retaining) an object in one's mind, and as having the function of non-distraction (Asanga, 2001). Mindfulness therefore appears, at least in classical accounts, to refer to the ability to hold something in working memory. There are several important effects of this: the first is that if information is held in working memory, it can be further processed and analyzed; the second is that the longer information is held in working memory in such a way that it becomes more easily available for recall. Supporting this view is a recent study by

¹⁰ See, for example, the Dalai Lama's talk in Riga on 9 September 2013 (http://www.dalailama.com/news/post/988-his-holiness-the-dalai-lama-speaks-on-theculture-of-compassion, accessed 27 January 2014) or the International Center for a Culture of Compassion (http://usa.heartshome.org/The-International-Center-for-a-Culture-of-Compassion.html, accessed 27 January 2013).

Jha et al. (2010) that reported that mindfulness practice resulted in improvements in working memory.

It is important to note that this approach, however, does not appear to account for the use of mindfulness in "objectless" traditions of meditation such as those used in the Dzogchen, Mahāmudrā, or Zen traditions, where the retention of a specific object in mind is inimical to meditation. This is important to note, as these traditions of practice are important sources for contemporary understandings of mindfulness, such as that of Kabat-Zinn (Dunne, 2015). Dunne (2015) calls these "nondual" traditions alongside the "classical" traditions of Buddhism. It is important to note that both are traditional forms of understanding mindfulness in Buddhism and that neither can be considered more authentic or legitimate as an understanding of mindfulness than the other. It remains a possibility, however, that these objectless forms of meditation are also employing working memory. While they are not engaging a particular object in order to transfer it from working to long-term memory, it is possible that they are sustaining working memory in a particular process, a process that is conceptualized within the traditions as "nondual" consciousness. Sustained practice on this process in working memory may automate the process in a way roughly analogous to the transfer of information to longterm memory when meditating on an object. If so, this would warrant using the term "mindfulness" for both styles of practice despite their obvious differences. This remains an empirical question to be examined though further research.

What may be useful about this approach is that working memory is considered a basic psychological universal. In other words, like classical accounts of mindfulness, it is constantly being deployed for basic human functioning, but it can be cultivated and
strengthened. In the cultivation of *samatha* or meditative quiescence, meditators are instructed to choose a particular object or process and then familiarize their mind with that object repeatedly and intensively, thereby strengthening mindfulness of that particular meditation object (Lamrimpa, 1992; Lodro, 1990). There are injunctions against repeatedly switching one's object of meditation before one has gained a good degree of familiarity with it (Lamrimpa, 1992). This shows that in such texts and practices, mindfulness is not understood as merely being attention, but as the ability to retain a *familiarized* object in mind. Classical mindfulness appears to be dependent on practice with its specific contents. This may explain why introductory-level mindfulness training on a particular object or process (such as the breath or awareness of the present moment) may not translate directly into increased performance on other attention-based tasks, and may not result in direct, obvious benefits in the treatment of disorders like ADHD, which is not to say that it might not be beneficial through various indirect means. At very high levels of training, texts on *samatha* do appear to claim that heightened attention arises that can be trained on a variety of objects, but that level of training is beyond what is attempted in most contemporary settings (Gyatso, 2003; Lamrimpa, 1992).

Understanding mindfulness as the ability to retain information in working memory honors traditional classical definitions of mindfulness while allowing us to bring mindfulness into further dialogue with psychology and neuroscience. Furthermore, it helps to disentangle the idea that mindfulness is somehow equivalent to attention, and indeed "attention" is a separate and distinct mental factor in Buddhist psychology. In classical traditional accounts, just as important as mindfulness itself are the *contents* of mindfulness: what is being held in mind, what is being retained, what it is that one is trying not to lose or forget. Indeed, traditional Buddhist accounts of mindfulness, such as that presented in Tsongkhapa's *Great Treatise* (2004), present a host of things that one is to retain in mindfulness, including things such as how damaging it is to cherish only oneself and fail to cherish others (Tsongkhapa, 2004). The Buddha's teaching on the "four foundations of mindfulness" in the *Satipatthāna sutta* lists four categories of phenomena that one can hold in mindfulness: mindfulness of the body, mindfulness of sensations, mindfulness of the mind, and mindfulness of phenomena (Goldstein, 2013). There is a long list of what could be an object of mindfulness meditation in the Buddhist tradition; indeed, an exhaustive list would have to include every virtuous mental state, all virtuous objects, and all correct and beneficial knowledge, but in summary, these would all be subsumed under the Four Noble Truths: the truth of suffering, the truth of the causes of suffering, the truth of the cessation of suffering, and the truth of the path that leads to the cessation of suffering (Goldstein, 2013).

Contemporary accounts of mindfulness, which describe mindfulness as attending to the breath or to the present moment, appear to align with this. The operational definition offered by Bishop et al. (2004), for example, is a two-component model that includes (1) "the self-regulation of attention so that it is maintained on immediate experience" and (2) "a particular orientation towards one's experiences in the present moment…characterized by curiosity, openness, and acceptance." Such contemporary accounts and definitions can be seen as a subset of all the possible objects that could be held in mindfulness. Since awareness of present-moment experience is not a single object, it may be that mindfulness involves retaining either an *object* (which could be a mental image, a thought, an emotion, etc.) or a *process* in working memory. This does not break with the tradition, since as noted above there are a number of Buddhist practices that involve "objectless" forms of meditation (where the mind does not focus on a particular object, but rather engages in a particular type of processing, or the disengagement of a particular type of processing) or that involve the mind taking itself as the object, reflexively. As these styles of practice are not foregrounded in the *Lojong* texts examined for the present work or in the contemporary protocols for cultivating compassion that draw from the *Lojong* tradition, I will not concentrate on such practices. My main point here is to suggest that it is worth devoting attention in contemplative science to the *contents* of mindfulness, and not merely mindfulness itself as if it always had the same content or could only have one small set of contents.

Analyzing the Contents of Mindfulness

As mentioned, holding something in working memory is one way of embedding it deeper in one's long-term memory. Another advantage of holding something in working memory is that one is able to process that information in ways that one cannot when it is not in working memory. This parallels the presentation of employing both "analytical meditation" (Tib. *dpyad sgom*) and "stabilizing meditation" (Tib. '*jog sgom*) in the *Lojong* tradition and in contemporary protocols based on that tradition (Negi, n.d.; Wilson, n.d.). In stabilizing meditation, one merely retains the object in one's awareness but one does not investigate it or observe it in a way that yields insight or knowledge. Stabilizing meditation may build up the mental capacity to hold something in working memory for longer and longer periods of time, yet it does not yield insight into the nature

of what one is holding in mind. Once one is able to hold an object in mind for a more than a few moments, one can then engage in analytical meditation, which is the analysis of that object in ways that yield beneficial knowledge. After new knowledge has been gained, one can then further engrain that knowledge in one's memory by sustaining it non-analytically (Pabongka, 2006; Wilson, n.d.).

A degree of analysis appears to be present in contemporary forms of mindfulness meditation, such as MBIs. Practitioners of these styles of meditation often first engage in stabilizing meditation by holding the breath in working memory, disengaging the analytical mind that might prevent sustained attention. Here, the object is the breath, and the meditation is non-analytical. They may then move on to the practice of attending to sensations, or the present moment. Here, rather than a single object, it is a process that is being held in mindfulness, and anything in the whole range of experience can arise as an object. Practitioners are guided, however, to notice and observe their thoughts, emotions and sensations, and to realize that they are transient and products of their own mind, rather than necessarily accurate reflections of reality (Baer, 2003; Kabat-Zinn, 1990). Since this practice is aimed at gaining new knowledge about phenomena, it can be considered an insight practice, rather than a straightforwardly stabilizing meditation practice. It is in fact in the gaining of these insights, and not merely in the cultivation of mindfulness (the capacity to retain an object or process in working memory), that it appears the greatest benefits of such forms of meditation arise, as practitioners learn that they can respond, rather than react automatically, to stimuli (Baer, 2003). In the Buddhist tradition, it is wisdom (Skt. *prajnā*, Tib. *shes rab*) that is truly beneficial in the alleviation of suffering, and meditative concentration (Skt. samādhi, Tib. ting nge 'dzin) is seen as a

necessary support for the achievement of that insight, which meditation concentration must itself be grounded in ethical conduct (*sīla*), according to the model of the "three higher trainings" (Skt. *triśikṣa*, Tib. *bslab pa gsum*) presented by Atiśa in his *Lamp* (Rinchen, 1997).

Clearly, if contemporary mindfulness meditation actually involves gaining insight into the nature of reality, we are beginning to enter an area where we speak of the normative dimensions of mindfulness. This is especially true when we consider that the very insights to which contemporary mindfulness meditation is supposed to lead reflect very specific and core beliefs of the Buddhist tradition, such as the transitoriness or impermanence of mental experience, the disparity between our thoughts and emotions and objective reality, and the constant construction of reality that our mind engages in (Baer, 2003).

The normative, cultural and religious context of meditation becomes all the more apparent, however, when we consider that the objects of mindfulness need not be restricted to the breath and the present moment, as noted above, and that there are a range of other objects and styles of analysis that can be employed in meditation, and that are indeed employed in meditation in the Buddhist tradition. Recently, more attention is being paid to other secularized meditation practices beyond MBIs, two of which I will examine here. Because these practices explicitly aim to help individuals cultivate values, they cast the question of cultural context into even starker relief.

Kosslyn (2005) asks us to introspect on what happens when we ask ourselves the following question: "What shape are Mickey Mouse's ears?" Typically, we respond by visualizing the cartoon mouse's head and directing our attention to his ears. He notes that

104

this is "a hallmark of information's being processed in working memory" and he calls this specific use of working memory "reflective thinking." He contrasts this with the question, "Is Mickey Mouse a cartoon character?" For most of us, we do not have to bring up an image of Mickey Mouse in our working memory in order to answer this question; we can answer it virtually automatically on the basis of stored knowledge. There are plenty of examples of this: for example, if I ask myself which are longer, my cat's hind legs or front legs, I can solve the problem by visualizing what my cat looks like when she stands on her hind legs. Yet if someone asks me what my cat's name is, I have no problem responding instantly without that sort of mental processing or visualization. When we engage in reflective thinking, of course, this need not involve only a visual image, Kosslyn notes, and the theories that are most compelling in explaining these processes are those of grounded cognition, whereby multiple sensory modalities are typically brought online in recalling an experience or engaging in conceptual thought through simulation (Barsalou et al., 2003; Barsalou, 2005).

Mindfulness and Compassion in Analytical Meditation Practices

Similar processes may be at work in other contemporary contemplative practices that explicitly employ analytical meditation or mindfulness that involves the processing of content that is more clearly normative than the present moment or the breath. In the Japanese practice of Naikan, for example, clients spend an entire week, from fourteen to sixteen hours a day, recalling their past through the use of three key questions: "What did this person give to me? What did I give back to them? What trouble did I cause them?" (Ozawa-de Silva, 2006). They begin with their mother, then move on to their father, then spouses, siblings, children, friends, colleagues, and so on, and typically end with their mother again on the final day. The practice certainly employs mindfulness: the clients have to retain a focus on the person they are meditating on, and on the particular question they are engaged in at that moment. Sessions are two hours long, interrupted only for a brief interview with the practitioner, in which the client gives a short report on what they have recalled during the previous two hours.

In one case, a woman referred to by the pseudonym Noriko had difficulty engaging in the practice because whenever she tried to bring her father to mind, she saw only one image: that of him standing in the kitchen of their house, a bloodied knife in his hand, her mother lying dead on the floor, and him saying "There's nothing left for me!" and then stabbing himself (Ozawa-de Silva, 2006). Naturally, whenever that image came to mind, her body and mind would react with a negative emotional reaction; and since this was the only thing she could think of when she thought of her father, these emotional reactions were taking their toll on her, and she was suffering physically and mentally. Nevertheless, she tried to engage in the process of analytical meditation by using Naikan's three questions, asking "What did he give to me?" Finally, after a few days, she was able to bring back one more memory: that of him taking the family camping; as they sat inside the tent, he gave the children ice cubes which they put in their mouths. They said "They're cold!" and laughed. Being able to bring to mind that alternative image allowed her to replace the first image; and naturally the new image elicited a completely different embodied emotional response from her. At the end of the Naikan practice, she was able to completely reconceptualize and re-image her father. She realized that his murder of her mother and his attempted suicide had come about because of the

106

tremendous mental and physical suffering he was undergoing, and she felt compassion for him and forgave him. Her final image of her father, at the end of her Naikan session, was of him in a body of pure light, and of herself washing him in light and sending him off into the universe as a ball of light (Ozawa-de Silva, 2006).

Cognitively-Based Compassion Training (CBCT), drawn from the Lojong tradition, bears similarities to Naikan. CBCT explicitly employs both non-analytical and analytical styles of meditation to call into question and undermine established patterns of thinking and reacting when they are deemed to be detrimental to the person and to others (Negi, n.d.; Ozawa-de Silva and Negi, 2013). Specifically, some of these unhelpful patterns involve bias (counteracted through equanimity or impartiality), self-centeredness (counteracted through the cultivation of cherishing others), feeling a lack of connection with others or need to rely on others (counteracted through discerning interdependence), and so on (Negi, n.d.). The first two of the eight topics in the CBCT protocol, namely "mindfulness of the breath" and "investigating the nature of mental experience" closely resemble the practices used in MBIs, in that the breath is used as a focus for the strengthening of mindfulness in a non-analytical way, then the breath is removed as the object of focus, and the practitioner merely retains the process of attention to the unfolding of mental experience with the eventual intention that the practitioner will come to observe that mental events are transient and lack concrete reality. After these two steps, however, the protocol employs mindfulness to hold certain concepts or persons in working memory so that they can be analyzed from new perspectives (Negi, n.d.).

Like Naikan, CBCT is clearly normative. While Naikan is structured to evince a recognition of one's dependence on others and how much one has received from others,

despite having caused difficulties for them oneself, thereby creating strong emotions of gratitude, forgiveness and the sense of being loved and supported by others, CBCT likewise is structured to guide practitioners through a series of similar realizations. It is in the nature of the structure of the proposed analyses and the insights or realizations that they should yield that we see most clearly reflected particular cultural norms. For example, practitioners investigate the nature of their own mental experience in order to learn to differentiate destructive emotions (such as hatred, jealousy, or greed) from constructive ones (such as compassion, love, or contentment). They then are guided to seek to recognize that destructive actions stem from destructive emotions, whereas constructive actions stem from constructive emotions. When one recognizes one's own fundamental wish for well-being and happiness, that one's happiness depends more on one's inner state of mind and emotions than on external circumstances, and that one can exercise a degree of control over those emotions, and when one takes responsibility to do so, what is called "self-compassion" in the CBCT protocol arises: a determination to establish one's own well-being through the gradual taming of one's own destructive emotions (Ozawa-de Silva and Negi, 2013). It should be noted that "self-compassion" is not a term indigenous to the Buddhist or specifically *Lojong* tradition. Rather, the CBCT protocol explicitly refers to the Tibetan term nges 'byung to explain the topic of "selfcompassion," which is step 3 in the CBCT protocol (Negi, n.d.). It also states that when one turns this outlook towards others in an unbiased way, it results in compassion (Negi, n.d.). The key in using the term "self-compassion" appears to be that the practitioner develops not merely the wish to be free from suffering (which, as we shall see, is believed to be innate in the *Lojong* tradition and therefore does not need to be cultivated),

but specifically the wish and determination to be free from the underlying *causes* of suffering, which are now recognized to lie in destructive attitudes, emotions, and behavioral patterns. This understanding of "self-compassion" should be differentiated from the presentation of that same term by Neff (2005, 2007, 2011), where the term is understood as referring to self-acceptance and self-soothing. "Self-compassion" in CBCT involves both an acceptance of oneself and a critical attitude towards one's destructive tendencies. By differentiating oneself from one's mental states, however, this critical attitude should not extend into self-criticism aimed at one's own nature.

In CBCT, as in traditional Lojong texts, the purpose of mindfulness is closely tied to ethical considerations. The informational content of what is to be kept in mind primarily concerns what is beneficial and what is harmful to oneself and others. It is therefore clear that mindfulness practice, in this broader sense, would be highly reflective of a cultural outlook. One clear example would be the emphasis on inner qualities over external circumstances in happiness and suffering, but other interesting cultural norms are also called into question through this practice when it is taught in modern western societies. For example, commonly held notions of good and evil, and of free will, become problematized by the analytical meditation proposed in CBCT. If individuals engage in harmful actions because they are afflicted by destructive emotions, and if those emotions arise because of ignorance rather than their own free will, then it becomes difficult to maintain a position that there are certain people out there in the world who freely choose to cause harm simply because they are evil. Concepts of justice and punishment are called into question. Such topics are explored directly by the Dalai Lama in *Beyond Religion*, where he devotes a full chapter to exploring how a *Lojong*-based approach to

compassion invites us to rethink questions of justice and fairness (Gyatso, 2011). Cultural assumptions about always putting one's loved ones' interests, or one's country's interests first, over and above others', are likewise problematized by the sections of the CBCT protocol that employ analytical meditation to undermine bias, partiality, and prejudice (Negi, n.d.).

Naikan, CBCT, and a variety of other contemporary meditation programs can be seen as employing mindfulness, yet they expand the range of objects and processes that can be held in mindfulness beyond those typically used in MBIs. They also employ analytical meditation in a wider range of ways. These ways are structured, and employing them allows such meditation protocols to be highly relational; they focus not only on the practitioner's relationship to his or her breath and his or her present-moment experience, but they place the practitioner's relationship with other people directly into the sphere of mindfulness. Since they also embody norms regarding how one should optimally relate to others, however, they are naturally more explicitly normative in nature. Attention to analytical meditation practices, therefore, may more clearly reveal how mindfulness practice both reflects and affects culture.

Conclusion

This chapter has examined a few issues that will be important conceptual challenges for the emerging field of contemplative science. It began by examining the ease with which metaphysical positions can cloud attempts at laying a conceptual groundwork for contemplative science. We saw that these metaphysical incursions can come from both an appeal to the authority of contemplative traditions, which typically comes at the expense of the diversity within those traditions, or from an appeal to science as reason for scientific materialism. The chapter also examined the question of reductionism, which will remain an important topic for contemplative science going forward. Lastly, the chapter examined the question of mindfulness, and offered a way of understanding mindfulness such that contemplative science can be expanded to include a far wider range of practices than is currently given scope for by the definitions typically employed in mindfulness-based interventions.

Throughout all of this, it was suggested that the Dalai Lama's approach of secular ethics may provide a very useful tool for resolving some of these issues. This approach appears to be both a simple and a sophisticated way of dealing with the issue of metaphysics in ethics, and also provides a way for understanding contemplative practice in a much broader way that ties such practices to questions of ethical formation relating to the whole person and his or her life. Scholars of contemplative science might do well to attend to the works of the Dalai Lama on secular ethics as they engage in these debates. The point of this chapter was not to resolve these debates definitively, but rather to explore them as some of the most important and key conceptual issues that will need to be addressed in the coming years if contemplative science is to be built on a firm foundation. Certain other more specific conceptual issues in contemplative science, such as neurophenomenology, are addressed in subsequent chapters.

CHAPTER THREE: TYPES AND COMPONENTS OF COMPASSION IN THE LOJONG TRADITION

Compassion does not appear as a monolithic entity in the Buddhist tradition; rather, there are different types and degrees of compassion. Just as in the case of the terms "mindfulness" and "consciousness," a failure to delineate the specific types of compassion that are the object of cultivation in Buddhist practice can give rise to misunderstandings when speaking across traditions. It is therefore necessary to draw a series of distinctions, not only between the Buddhist tradition and the language of western thought (including that of the scientific disciplines), but also within the Buddhist tradition itself.

The first section of this chapter delineates three main types of compassion found in the *Lojong* tradition: compassion (*snying rje*), immeasurable compassion (*tshad med snying rje*), and great compassion (*snying rje chen po*). The next section explores immeasurable compassion specifically, approaching it comparatively by looking at both non-Mahāyāna texts and Mahāyāna *Lojong* texts, and examining how the *Lojong* texts establish "great compassion" as an additional category that goes beyond immeasurable compassion. The following section then looks at another way of delineating compassion, this time not by degree or intensity, but by "object," namely how the practitioner construes the object of compassion. This includes a brief examination of how compassion is presented the Dzogchen tradition, a Mahāyāna tradition that is typically based on and combined with *Lojong* practice, but that presents compassion in a distinctive way.

Three Types and Degrees of Compassion in Lojong

In examining compassion in Buddhism in general, and in the specific Buddhist traditions in particular, it is helpful to think of three degrees of compassion, since this will illustrate more clearly what particular type of cultivation is being advocated by the traditions. The first distinction that must be drawn is that between the commonplace compassion that individuals feel for their loved ones and the types of compassion that are the objects of cultivation in the Buddhist tradition. This type of compassion does not arise through meditation or cultivation, but rather is assumed to be spontaneous and innate in human beings. It is also limited in its scope and influenced by bias, meaning that it will be stronger towards loved ones, weaker towards strangers, and weaker still (if not nonexistent) towards enemies. This biased and limited compassion does not appear to be an object of cultivation in any Buddhist tradition, although it can serve as a basis for the cultivation of those other types of compassion that are portrayed as desiderata in Buddhist traditions. Of these latter types of compassion, which are the object of cultivation, the main two are "immeasurable compassion" and "great compassion," although there are others, as we shall see. In Tsongkhapa's Great Treatise (Tsongkhapa, 2004), the author distinguishes three forms of compassion in a typology that is relatively common for Lojong texts:

1. Compassion (*snying rje*)

2. Immeasurable compassion (*tshad med snying rje*)

3. Great compassion (*snying rje chen po*)

To begin with the distinction between the first two types of compassion, we can see that it is assumed in the very format of *Lojong* practice. One of the key *Lojong* approaches to cultivating compassion and the mind of enlightenment (Tib., *byang chub gyi sems*, Skt. *bodhicitta*) is the "seven-limb personal instructions on cause and effect" (*rgyu 'bras man-ngag bdun*). This method is so called, because it explains that *bodhicitta* is one effect that is created by cultivating six causes, hence the number seven. Drawing from both Tsongkhapa's *Great Treatise* (2004) and Pabongka's *Liberation* (2006) we can enumerate the seven limbs as:

- 1. Seeing all sentient beings as one's mother (mar shes pa)
- 2. Recollecting their kindness (*drin dran pa*)
- 3. Wishing to repay their kindness (*drin bzo ba*)
- 4. Love that delights in others (*yid 'ong gi byams pa*)
- 5. Great compassion (*snying rje chen po*)
- 6. The superior intention (*lhag bsam*)
- 7. The mind of enlightenment (*byang chub gyi sems*)

These seven limbs are, however, preceded by equanimity (*btang snyom*), which in this case refers to an impartiality or lack of bias towards others—that is, not caring more for friends and loved ones than for strangers or enemies. If we look at the approach of the seven-limb instructions, we can see that it assumes that individuals begin with a degree of compassion, but that this is biased compassion that does not extend to everyone. On the basis of that limited compassion, immeasurable compassion can be cultivated if the practitioner is able to generate equanimity. That immeasurable compassion can then be

strengthened into great compassion, which is the only type of compassion that can lead to the mind of enlightenment.

In addition to the cultivation of equanimity, a key part of this practice is that of recollecting the kindness of others. It is worth noting that the term here for recollecting or remembering is in fact *dran pa*, the same term that is often translated as "mindfulness." Building on the previous discussion of mindfulness, we can clearly see here that what is being sought is not simply an awareness of the present moment or a non-judgmental attentiveness, but rather the bringing to mind, and holding in mind, of a very specific content: the fact that all sentient beings have been kind to oneself in countless ways. In the *Great Treatise*, Tsongkhapa describes parts one and two of the seven-limb instructions as follows (Tsongkhapa, 2004:38):

Bo-do-wa (Po-to-ba) said that after you have recognized that all living beings are your mothers, you will quickly remember their kindness if at first you cultivate a remembrance of your mother's kindness in this lifetime. Do so in accordance with his presentation, as follows.

Imagine your mother clearly in front of you. Think the following a few times: "Not only has she been my mother at present but she has been so an incalculable number of times throughout beginningless cyclic existence." As your mother, she protected you from all harm and provided you all benefit and happiness. Particularly in this lifetime she carried you for a long time in her womb. Then, when you were a helpless, newborn infant, she held you to the warmth of her flesh and bounced you on the tips of her ten fingers. She suckled you at her breast . . . [and so on.]

Similarly, in Se Chilbu's commentary to Geshe Chekawa's instructional text on meditation, *Seven-Point Mind Training (blo sbyong don bdun ma)*, he writes (Jinpa, 2006:94):

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.

Once one has generated gratitude and loving kindness toward one's mother, one is then instructed to move on to one's father, other relatives, then strangers, and then enemies (see Jinpa, 2006:560; Stearns, 2006:378–80).

From these passages we can see that *Lojong* texts assume that individuals begin with a certain level of compassion that can extend out to at least one person, and the

example given is one's mother, but the inclusion of equanimity as a preliminary to the seven-limb instructions suggests that this first level of compassion is restricted by bias. We can easily see a clear distinction between limited, biased compassion and immeasurable compassion, but what then is the difference between immeasurable compassion and great compassion?

Immeasurable Compassion

In the *Great Treatise*, Tsongkhapa cites the *Ornament of Clear Realization* (*Abhisamayālamkāra*), writing, "You need wisdom to prevent falling into the extreme of cyclic existence, and you need compassion to prevent falling into the extreme of peace, so wisdom does not prevent you from falling into the extreme of peace" (Tsongkhapa, 2004:19). The "extreme of peace" is a term used in Mahāyāna texts to refer to an "individual nirvana" (Skt., *prātimokşa*) that is not the state of a "fully awakened one" (*samyaksambuddha*), that is not the full realization of an individual's potential, and that does not enable one to help others to the fullest extent. Therefore, since this line comes in a discussion of how to enter the Mahāyāna, one could easily read this as indicating that the non-Mahāyāna (so-called "Hīnayāna") practitioners—the hearers (Skt., *śrāvaka*) and the seekers of individual liberation (Skt., *pratyekabuddha*)—lack compassion, or that they do not teach compassion.

This would be a misreading of Tsongkhapa, however, since Tsongkhapa is using the word "compassion" (Tib., *snying rje*, Skt., *karuņā*) here to refer to great compassion (Tib., *snying rje chen po*, Skt., *mahākaruņā*), a type of compassion that goes beyond both limited, biased compassion, and immeasurable compassion. Earlier in the *Great Treatise*, Tsongkhapa explains that "Although *śrāvakas and pratyekabuddhas* have the immeasurable love and compassion whereby they think, 'If only beings could have happiness and be free from suffering,' these non-Mahāyāna followers do not think, 'I will take on the responsibility to remove the suffering and to provide the happiness of all living beings." (Tsongkhapa, 2004:32-33) Tsongkhapa makes this statement in the context of explaining why one must, in addition to cultivating compassion, develop a wholehearted resolve or "superior intention" (*lhag bsam*) that not only feels compassion for others on the level of a wish that they be free from suffering, but that strengthens that compassion to a level where one takes personal responsibility for their welfare. In other words, Tsongkhapa notes at one point that such non-Mahāyāna practitioners do have immeasurable love and compassion, while at another point he states that they lack the compassion that would protect them from falling into the extreme of peace or solitary nirvana. This rhetoric appears in other Lojong authors as well. Pabongka expresses that *śrāvakas* and *pratyekabuddhas* actually have "great hindrances to enlightenment" because of "great familiarity with absorption in the taste of bliss" such that "Even when they do try, it is hard for them to feel compassion, and so on, because they have already been liberated from their own suffering" (Pabongka, 2006:501). This seems to indicate that in his estimation the compassion generated by such practitioners is qualitatively different to that cultivated on the Mahāyāna path.

Contemporary readers should not in my opinion regard this as accurate portrayal of Theravāda practice, but rather as evidence of the rhetorical stress Tsongkhapa and others place on differentiating these degrees of compassion for the purpose of teaching *Lojong*. For Tsongkhapa, there is a qualitative difference, ultimately based in one's

118

motivation (*kun slong*), between the type of love and compassion that extends out impartially to all sentient beings, which may already seem to be an immensely elevated form of love and compassion, and the type that includes this but is so intense that it leads to a sense of personal responsibility towards those sentient beings.

This explains the need for the seven-limb personal instructions from a *Lojong* perspective: immeasurable compassion is different in degree and kind to great compassion in Tsongkhapa's eyes, and therefore one needs an approach that can heighten immeasurable compassion from the level of a wish (*smon pa*) that others might be free from suffering, to the point where great compassion arises. Only that level of compassion is capable of giving rise to the superior intention of taking responsibility for others' welfare upon oneself, the natural outcome of which is the mind of enlightenment or *bodhicitta* (Pabongka, 2006:533; Tsongkhapa, 2004).

The trope of the mother plays an important role here, which can also shed light on the difference between immeasurable and great compassion. The immediate predecessor to great compassion in the seven-limb instructions is *yid 'ong gi byams pa*, which is often translated as "affectionate love." *Byams pa* is the common term for love in Tibetan, which is typically defined as a wish that others be endowed with happiness. This particular type of *byams pa*, however, is not merely that wish, but is modified and specified by the term *yid du 'ong ba*, which means appealing, attractive, or delightful to the mind. Interestingly, Tsongkhapa himself does not elaborate much on this point in *Great Treatise*, and the term is better clarified in a much later *Lojong* text, Pabongka Rinpoche's *Liberation in the Palm of Your Hands* (Pabongka, 2006). In Pabongka's text it becomes clear that *yid 'ong gi byams pa* refers to a specific mental state whereby one takes delight in another. Since the passage is of importance and does not appear as extensively described in other texts such as Tsongkhapa's *Great Treatise*, it is worth citing it here at length:

This love appears in the form of a heartfelt cherishing, an affection for sentient beings. "Love through the force of attraction," said Geshe Potowa to an old woman, "is just like the love you have for your son Toelekor." In other words "love through the force of attraction" is being attracted to all sentient beings as if they were your own children. This love does not need a separate meditation topic: you will develop it automatically when you have developed some feeling for the preceding three sections: "Understanding All Beings to Be Your Mother," "Remembering Their Kindness," and "Wishing to Repay Their Kindness." (Pabongka, 2006:529).

In *Lojong*, "love" (*byams pa*) is defined as "wishing happiness for another," but here the term is further qualified by *yid 'ong gi*, which is loosely translated as the "force of attraction" in the above quote, although it might be better translated as "attractive" or "pleasing to the mind." Still, it might not be clear from this passage alone that this is a distinctive mental state different from "love" (*byams pa*). Later, Pabongka makes the point more clearly, when he writes:

Love through a force of attraction so strong that it makes you cherish sentient beings and hold them dear is as much a form of love as the love that wishes them happiness. However, the slight difference is that one form is general and the other specific. Love through the force of attraction is the sum of three things: understanding that all sentient beings are your mother, remembering their kindness, and wishing to repay their kindness. It necessarily precedes great compassion, for it brings about the generation of this great compassion. Compassion and the love that wishes happiness do not have such a fixed cause-and-effect relationship. One section of the *Great Stages of the Path* dealing with the repayment of the kindness of sentient beings tells how to meditate on the love that wishes happiness, and it is appropriate for you to sometimes meditate on this type of love *before* you meditate on compassion. However, meditating on this type of love *after* the compassion meditations accords with the traditional instruction on pursuing the practice. (Pabongka, 2006:529).

This passage shows that it is specifically *yid 'ong gi byams pa* that acts as an immediate precedent to great compassion, rather than the love that wishes happiness for others. It also suggests that the practitioner should meditate on *yid 'ong gi byams pa* in cultivating great compassion rather than the more standard type of love. It appears that for Pabongka Rinpoche, *yid 'ong gi byams pa* represents a particularly strong level of intimacy, which, if extended to all sentient beings, far exceeds the intensity of immeasurable love, which merely has the content of wishing all others to be free from suffering, but which is not conjoined with seeing all others as delightful and as precious as one's own child. Furthermore, Pabongka Rinpoche stresses that it is developed through a wish to repay kindness, which might lend it a certain intentional or motivational structure somewhat different to the love wishing happiness for others. Seeing that this stage of practice involves *yid 'ong gi byams pa* rather than the more general type of love

helps in understanding the reason for starting with meditations on the mother, such as the meditation on cognizing (*shes pa*) all sentient beings as having been one's mother in a previous life (*mar shes pa*).

In his Great Treatise, Tsongkhapa writes, "Once your mind is moved by great compassion, you will definitely make the commitment to free all living beings from cyclic existence. If your compassion is weak, you will not" (Tsongkhapa, 2004:28). By tying great compassion directly to the wish to free all beings from cyclic existence, Tsongkhapa places great compassion squarely within the Mahāyāna tradition, and distinguishes it from other forms of compassion, which he suggests are "weak" because they do not lead to this altruistic commitment. There appears to be both a qualitative and quantitative difference for Tsongkhapa in the compassion necessary for Mahāyāna practice, rooted in one's intention or motivation (kun slong).¹¹ This idea is reinforced by the way Tsongkhapa interprets the seven-limb instructions for generating *bodhicitta*, since he explains them with the topics: "1. Showing that the root of the Mahāyāna path is compassion; 2. How the six other personal instructions are either causes or effects of compassion" (Tsongkhapa, 2004:28). Although compassion (great compassion, in this case) is the fifth of the seven limbs, Tsongkhapa centralizes it to show its importance, seeing the others only in relation to compassion, either as prerequisites, or as its fruits.

¹¹ This interpretation is not unique to Tsongkhapa. It is found in Pabongka (2006) and in non-Gelugpa presentations as well. For example, Dzogchen Khenpo Chöga (2004:63) notes, "Relative bodhicitta has two aspects: the bodhicitta of aspiration and the bodhicitta of application. Neither the bodhicitta of aspiration nor the bodhicitta of application refers to action. Instead, both are concerned with motivation [*kun slong*] and intention [*bsam pa*]. Both types of relative bodhicitta are concerned with motivation, rather than the actual application of the six pāramitās, the six transcendental perfections. It is essential that one first give rise to the correct motivation; then, while maintaining this motivation, you can carry out any of the six transcendental perfections." All these presentations are in alignment with the model presented in CBCT as well (Negi, n.d.).

Tsongkhapa quotes from the *Questions of Sāgaramati Sūtra* in which the Buddha describes a hypothetical situation in which a householder's son has fallen into a pit, and although lots of people gather around wailing at his state, only the householder himself jumps in to save him. The other people watching presumably had compassion for the son, in that they wanted desperately for him to be free from his predicament and were greatly disturbed by it. Only the householder's compassion was great enough, however, to prompt him to place himself in danger by jumping in to save the boy. It would seem that Tsongkhapa is pointing to this degree and type of compassion when he says that it is a cause of the "extraordinary intention" (*lhag bsam*) to take responsibility for others onto oneself, and therefore of bodhicitta, and when he says that it is what prevents practitioners from falling into the extreme of peace, meaning solitary nirvana. The immeasurable love and compassion of those not on the Mahāyāna remains on the level of an aspiration or wish (*smon pa*).

Comparisons with the mettā sutta

Here we find a contrast between great compassion and immeasurable compassion, two types of compassion, but it is from the perspective of a single tradition—a Mahāyāna tradition, more specifically a Tibetan Buddhist tradition, and even more specifically a Gelug tradition. Therefore, it would not be objectionable to ask if there might be a degree of bias in this presentation. If we look at two texts from the Pali canon, we can see how immeasurable compassion is presented in texts considered authoritative by non-Mahāyāna traditions. A brief examination of *mettā* is also warranted because it serves as the basis for contemporary "lovingkindness" meditation styles, and the relationship between these forms of meditation and the compassion training protocols based on *Lojong* is often a source of confusion (Galante et al., 2014).

The *Karanīyamettā sutta* is a Pali text that focuses on *mettā*, often translated now as "lovingkindness." *Mettā* is the Pali cognate of *maitrī* in Sanskrit, which is the term *byams pa* (love) in Tibetan. Although this sutra is about immeasurable love, as opposed to compassion, love and compassion are often presented in Buddhist texts as going hand in hand, since love is understood as the wish for a sentient being to have happiness, and compassion as the wish for a sentient being to be free from suffering, making them two sides of the same coin. Since, however, there are various types of love, just as there are various types of compassion, not all types of love are the flip side of all types of compassion. As noted, according to Pabongka Rinpoche, the specific type of love to be cultivated in the seven-limb cause and effect instructions is *yid 'ong gi byams pa*, which is not merely a wish for another to be happy, but a love that views the other as precious and delightful. This acts as a support for the type of powerful, unbiased compassion that is the object of the seven-limb instructions; it is therefore not merely a corollary of that compassion. Nevertheless, to turn to the *mettā sutta*, the Buddha is quoted as teaching:

 He who is skilled in (working out his own) well being, and who wishes to attain that state of Calm (Nibbāṇa) should act thus: he should be dexterous, upright, exceedingly upright, obedient, gentle, and humble.
Contented, easily supportable, with but few responsibilities, of simple livelihood, controlled in the senses, prudent, courteous, and not hanker after association with families.

124

3. Let him not perform the slightest wrong for which wise men may rebuke him. (Let him think:) 'May all beings be happy and safe. May they have happy minds.'

4.& 5. Whatever living beings there may be — feeble or strong (or the seekers and the attained) long, stout, or of medium size, short, small, large, those seen or those unseen, those dwelling far or near, those who are born as well as those yet to be born — may all beings have happy minds.

6. Let him not deceive another nor despise anyone anywhere. In anger or ill will let him not wish another ill.

7. Just as a mother would protect her only child with her life even so let one cultivate a boundless love towards all beings.

8. Let him radiate boundless love towards the entire world — above, below, and across — unhindered, without ill will, without enmity.

(Thanissaro, 2011)

On first glance, looking at this passage would appear to support the point made by Tsongkhapa (and other Tibetan Buddhist authors) that there is a significant difference between the immeasurable love and compassion presented in this sutra, and the "great compassion" that a Mahāyāna practitioners must cultivate and that is the goal of *Lojong* practice. For instance, one could dwell on the Buddha's instruction that (1) the practitioner should have "few responsibilities" which seems to contrast strongly with the "extraordinary intentions" (*lhag bsam*) of taking upon oneself the responsibility for infinite sentient beings; and (2) the mental state is described as a wish (*smon pa*), the content of which is "May all beings be happy and safe..." which would appear to

resemble the relatives standing around the pit rather than the father who jumps in. Much emphasis is made on the boundless or immeasurable quality of the mental state, but that is acknowledged by Tsongkhapa. He does not make a distinction due to the fact that Mahāyāna great compassion is somehow more expansive than non-Mahāyāna immeasurable compassion.

Already in this passage, however, we do have something that pushes back against this interpretation, namely the seventh line, which reads "Just as a mother would protect her only child with her life..." If our intention is to read this sutra as a description of non-Mahāyāna immeasurable compassion—along the lines of the spectators who do not jump into the pit, whose compassion is "weaker," and in contrast with Mahāyāna great compassion that is active and takes responsibility for others—then this line would appear to resist that reading. The image of a mother's love for her only child is an intense one, and it is further strengthened by the inclusion of the phrase that she would protect her child even with her life—in other words, take the fullest responsibility. The Mahāyāna descriptions of the intensity of great compassion do not really go beyond this, even if they speak of spending eons in a hell realm to benefit a single sentient being, as the First Panchen Lama writes in his celebrated Offering to the Spiritual Master (bla ma mchod *pa*) text. In fact, realizing the possibly unsurpassable power of this image, they also rely on the very same trope. And as we already mentioned, the love is immeasurable and extends to all sentient beings, not just one child, so it is not tainted by bias or partiality. This certainly calls into question our original reading. Recall the explanation given above by Pabongka Rinpoche of *yid 'ong gi byams pa*, the love that should be cultivated in

training in Mahāyāna compassion. We see that it is precisely the same trope of the love of a mother for her child:

This love appears in the form of a heartfelt cherishing, an affection for sentient beings. "Love through the force of attraction," said Geshe Potowa to an old woman, "is just like the love you have for your son Toelekor." In other words "love through the force of attraction" is being attracted to all sentient beings as if they were your own children. (Pabongka Rinpoche, 2006:529)

Therefore, we must acknowledge that despite the fact that some might now look to texts such as the *Karaņīyamettā sutta* as a "non-Mahāyāna" text or somehow the domain of the Theravādan tradition, this is an anachronistic way of approaching the topic. Central to Mahāyāna rhetoric is the notion that earlier Buddhism is neither rejected nor denied, but rather completed or fulfilled. Therefore, the Buddha's teaching here could be seen as applying broadly to both Mahāyāna and non-Mahāyāna practices of compassion.

Turning to the Theravādan *abhidhamma* tradition, we can look at the way compassion is presented in the *Abhidhammattha Sanghaha*. Here, we note that the section on the four immeasurables only lists two of them: compassion and appreciative joy (Pali and Skt., *muditā*). This is because loving-kindness has already been explained as a mode of the mental factor of non-hatred (Pali, *adosa*; Skt., *adoṣa*; Tib., *zhes sdang med pa*), and equanimity (Pali, *upekkhā*) as a mode of neutrality of mind (Pali, *tatramajjhattatā*). Bhikkhu Bodhi explains in his commentary that "Whereas non-hatred and mental neutrality—the factors underlying loving-kindness and equanimity—are present in all beautiful cittas, these two are present only on occasions when their functions are individually exercised." (Bodhi, 2000:90) This is another instance where love or lovingkindness and compassion are not presented as two sides of the same coin, even when we are talking specifically about what is the same category of love and compassion, namely immeasurable love and immeasurable compassion. How then is compassion here to be understood? Bodhi provides the following definition from the commentarial tradition:

Compassion... has the characteristic of promoting the removal of suffering in others. Its function is not being able to bear others' suffering. It is manifested as non-cruelty. Its proximate cause is seeing helplessness in those overwhelmed by suffering. It succeeds when it causes cruelty to subside, and it fails when it produces sorrow. (Bodhi, 2000:90)

This definition is more general: it does not contain the strong imagery of the mother willing to give her life for her only child. It would therefore seem to be a broad definition of compassion that could encompass the greater and lesser degrees of compassion described in the *Lojong* tradition and in texts such as Tsongkhapa's.

Although it is hard to draw conclusions based on this brief survey of Pali materials, we can see something in these texts that is maintained to the present day in terms of different approaches to the cultivation of compassion, and that is the types of meditation practices that are being recommended. The instruction given in the *Karaṇīyamettā sutta*, and fully concordant with the definition of compassion given in the *abhidhamma* literature, is a relatively simple one: to generate a particular wish, and then to extend this outward boundlessly to encompass all sentient beings. This remains the most common contemporary way to practice "*mettā* meditation". If we were to ask what the "ingredients" of such a practice would be, the key ingredient would be the generation of this, in itself, rather simple wish. A second ingredient would be to extend this thought outwards boundlessly. A third ingredient, not explicitly mentioned but implied, would be impartiality.

The instructions given in the *Lojong* tradition are, by way of contrast, much more extensive and complicated, as evidenced by the length of Se Chilbu's commentary on Geshe Chekawa's *Seven Point Mind Training* (even the root text is far longer than the *Karaņīyamettā sutta*) or the extensive section of Tsongkhapa's *Great Treatise* that is devoted to the cultivation of great compassion by means of the seven-limb cause and effect method or the exchange of self and others method. The ingredients for great compassion in such texts would appear to include not only the four specific causes of great compassion listed in the seven-limb cause and effect method,¹² but also the preliminary practices that come before that—in other words, practices such as the "four thoughts that reverse the mind," which will be discussed later.

What can we conclude from the fact that while our examination of definitions proved inconclusive, we do see significant differences in the presentation of the practices and the "ingredients" that are necessary for cultivating compassion? We can infer that the *Lojong* authors were convinced that there was a significant difference between these types of compassion, and had elaborate practices that differed significantly from non-Mahāyāna practices and that were designed to effect this different type of compassion. The elaboration is no doubt related to the difference they perceived.

¹² Since compassion is the fifth in the series, it is presented as being caused by the first four. The first four are: seeing all sentient beings as one's mother, recalling their kindness, wishing to repay their kindness, and generating affectionate love (Tsongkhapa, 2004).

Objects of Compassion and Objectless Compassion

According to both traditional *Lojong* and contemporary scientific definitions of compassion, compassion arises when a person perceives or recognizes another person as suffering (Gilbert, 2005; Goetz et al., 2010; Halifax, 2011; Singer & Bolz, 2013). However, the first level of compassion, which is biased, does not extend out impartially to all and can be mediated by a number of factors. Therefore another equally important component appears to be the ability to identify with others through affection, or at a minimum, a sense of commonality. If one dislikes another person, this second condition may be lacking, such that even if one sees that person suffer, compassion may not arise (Singer, 2006). Similarly, one may feel tremendous affection for another person, but if one does not perceive that person to be suffering, compassion may not arise. In contemporary presentations of compassion training based on *Lojong*, this second condition sometimes comes under the heading of stressing our "common humanity"what the Dalai Lama called one of the two pillars of secular ethics (Gyatso, 2011). In traditional *Lojong* presentations, this title is not used, but a similar sentiment appears, especially in passages related to the "equalizing of self and others." In one of the Sakya master Gorampa's brief Lojong texts, "A Key to the Profound Essential Points: A Meditation Guide to 'Parting from the Four Clingings,'" he writes, drawing from a common *Lojong* tradition going back to Santideva:

Just as I desire happiness, so too do all sentient beings; therefore just as I pursue my own happiness, so must I seek the happiness of all beings. Just as I shun suffering, so too do all sentient beings; therefore just as I

alleviate my own suffering, so must I alleviate the suffering of all beings. (Jinpa, 2006:536)¹³

In the previous section we saw that compassion can be distinguished on the basis of the degree of affection and closeness one feels towards others, and that the seven-limb instructions are intended to "ramp up" that degree of affection in order to facilitate greater levels of compassion. Compassion can, however, also be classified not only on the basis of one's affective connection with the other but also on the basis of how one cognizes or constructs the other and the other's suffering. The *Lojong* tradition supports the idea that just as one's level of affection can be increased, so can one's ability to perceive reality on deeper levels, which enables the perception of subtler levels of suffering, giving rise to deeper levels of compassion.

One such classification is outlined in Candrakīrti's *Introduction to the Middle Way* (Tib., *dbu ma la 'jug pa*, Skt. *Madhyamakāvatāra*). Although earlier sources for this classification exist, Candrakīrti's text is often cited in the *Lojong* literature. In this classification, there are three types of compassion: *sems can la dmigs pa'i snying rje* or compassion regarding sentient beings; *chos la dmigs pa'i snying rje* or compassion regarding dharmas or phenomena (*chos*); and *dmigs pa med pa'i snying rje*, which is often translated as "non-referential compassion" but which may better be translated as "non-objectifying compassion," particularly in the context of the Gelug school of Tibetan

¹³ Just as Singer et al. (2006) showed that small interventions may lead to an establishment of bias that affects empathy, a small body of research is growing to show that selective attention tasks (Lueke & Gibson, 2014) and mindfulness tasks (Martiny-Huenger et al., 2014) may decrease ingroup/outgroup bias. If corroborated, this would support the use of such practices as the one quoted here.

Buddhism, for reasons I will explore later. In the first chapter of *Introduction to the Middle Way*, Candrakīrti writes (2005:59):

Beings think "I" at first, and cling to self;They think of "mine" and are attached to things.They thus turn helplessly as buckets on a waterwheel,And to compassion for such beings I bow down!Beings are like the moon in rippling water,Fitful, fleeting, empty in their nature.Bodhisattvas see them thus and yearn to set them free.

Their wisdom is beneath compassion's power.

As indicated in this passage, a practitioner's ability to feel compassion for another depends on that practitioner's understanding of the suffering that is being experienced. The implication is that the more one is able to see underlying levels suffering in addition to the mere coarse manifestations of suffering, the more one is able to generate compassion for another. One who does not understand self-clinging or attachment to things as a cause of suffering will not be able to feel compassion for beings caught up in these states. For example, a rich, famous celebrity would not be the object of compassion of a person who did not see attachment to such things as problematic, but might be the object of compassion for someone who did hold such a perspective. Similarly, a person who does not understand emptiness would not be able to feel strong compassion for beings who lack that understanding, since that person would not fully comprehend the peace and joy that they lack, and how their suffering comes from a lack of understanding emptiness. Since the two key ingredients to compassion are feeling affection and perceiving suffering, the degree of compassion one experiences will depend on both of these. In the Tibetan Buddhist tradition, therefore, compassion is understood as depending on being able to see the three levels of suffering, or *sdug bsngal gsum*. These are *sdug bsngal gyi sdug bsngal* or the "suffering of suffering," sometimes translated as "manifest suffering," since it refers to suffering that is clearly recognized by all as suffering; *gyur ba'i sdug bsngal* or "the suffering of change," which refers to the inherently unsatisfactory nature of impermanent, stimulus-dependent pleasures; and *khyab pa 'du byed kyi sdug bsngal* or "the pervasive suffering of conditioning," which refers to the fact that as long as the mental and physical aggregates of the person are conditioned by the afflictive emotions and karma, true, lasting happiness is not possible.¹⁴

When it comes to compassion that is conjoined with an understanding of ultimate reality, classifications of compassion again diverge, this time because understandings of ultimate reality vary across Buddhist traditions. For example, the Dzogchen tradition of Tibetan Buddhism, held largely by the Nyingma school (although the Bon tradition also has a Dzogchen tradition), employs the term compassion in a way that seems strikingly different to those above. Nyingma and Gelug scholars will not necessary agree, therefore, on the meaning of the term *dmigs pa med pa'i snying rje* in Candrakīrti's text. While those in the Nyingma tradition may feel comfortable understanding that term as "objectless compassion" or "non-referential compassion," those in the Gelug tradition

¹⁴ Engle (2009:104-125) provides a good summary of the three types of suffering as presented in this tradition with textual references, including references from Tsongkhapa's *Great Exposition*.

may prefer understanding it as "non-objectifying compassion."¹⁵ The Tibetan scholar and historian Thuken Nyima, for example, writes of the Dzogchen practitioners:

Alternatively, they use three terms: originally pure nature, spontaneously present intrinsic nature, and all-pervasive compassion. They say that the original essence, empty of basis or arising, is the originally pure nature; the unobstructed radiance of emptiness is the spontaneously present nature; and the energy of that—all pure and impure appearances—is the all-pervasive compassion. They say that the first term refers to the inseparability of awareness and emptiness; the second refers to the inseparability of clarity and emptiness; and the third refers to the inseparability of appearance and emptiness. (Nyima, 2009:88-89)

One of the interesting things about the presentation of compassion in the Dzogchen tradition is how closely it is tied with realization of emptiness. In fact, it may be misleading in some ways to translate *thugs rje* simply as compassion. Some Nyingma authors seem to advocate the position that direct realization of the nature of one's mind (i.e. its empty and luminous nature) gives rise to great compassion for all beings (Pettit, 2002), in contrast to the Gelug understanding, whereby realization of emptiness can deepen one's compassion, but does not spontaneously give rise to great compassion. The Nyingma tradition also has an understanding of what is meant by "objectless compassion" which is connected with the realization of emptiness. Although realization of emptiness is present in *Lojong* practice as well, one does not find the idea that realization of emptiness

¹⁵ Non-referential compassion has been an important focus of the scientific study of compassion, and one of the earliest neuroscientific studies of compassion of note examined this form in particular (Lutz et al., 2004; Lutz et al., 2008).

would naturally give rise to great compassion; rather, realization of emptiness is presented as a parallel, complementary practice (Jinpa, 2006).¹⁶ From one perspective, the Dzogchen approach to compassion appears to diverge from the standard *Lojong* tradition. Other Nyingma authors, however, express a dialectical relationship between compassion and realization of emptiness. For example, Dilgo Khyentse Rinpoche writes:

Absolute Bodhichitta is the inseparability of voidness and uncontrived compassion. It is the simplicity of the natural state, beyond all concepts and intellectual limitations, out of which spontaneous, objectless compassion arises, benefitting all sentient beings. As you make progress in your practice, the two aspects of bodhichitta reinforce one another. To catch even a glimpse of the absolute nature of mind gives you the proper perspective to practice relative bodhichitta, and, in turn, the practice of relative bodhichitta broadens your realization of absolute bodhichitta. (Paltrul & Dilgo Khyentse, 1993:67)

The fact that the Nyingma tradition employs a special understanding of compassion in the Dzogchen context does not mean that overall the Nyingma understanding of compassion differs from the *Lojong* tradition's presentation of compassion. In non-Dzogchen contexts, Nyingma presentations of compassion employ the same language and techniques regarding compassion and its gradual, systematic

¹⁶ In an unpublished study presented to the American Psychological Association and made available to the author, Tom Pruzinsky studied 18 *Lojong* texts to examine whether compassion (here understood as relative *bodhicitta*) or emptiness (absolute *bodhicitta*) was taught first (Pruzinsky, n.d.). He found that in 10 texts emptiness was taught first, and in six compassion was taught first. He writes, "most texts written in the Kagyu/Nyingma tradition of Tibetan Buddhism placed the cultivation of absolute bodhichitta prior to cultivating relative bodhichitta whereas the reverse was true for those texts written in the Geluk tradition of Tibetan Buddhism" (Pruzinsky, n.d.).
cultivation. Recent Nyingma authorities emphasize the importance of constantly cultivating compassion for all beings in a manner that is in full accordance with the *Lojong* texts. For example, the presentation of compassion in a Nyingma texts such as Patrul Rinpoche's (1998) *Words of My Perfect Teacher* does not appear to differ significantly from that of Tsongkhapa. Patrul Rinpoche provides the following instructions:

The image given for meditating on compassion is that of a mother with no arms, whose child is being swept away by a river. How unbearable the anguish of such a mother would be. Her love for her child is so intense, but as she cannot use her arms she cannot catch hold of him. 'What can I do now? What can I do?' she asks herself. Her only thought is to find some means of saving him. Her heart breaking, she runs after him, weeping. (Patrul Rinpoche, 1998:212-213)

This passage is reminiscent of the earlier passage from the *Karanīyamettā sutta* examined above.

The Relationship Between Renunciation (nges 'byung) and Compassion

In discussing the term "compassion" as it appears in the *Lojong* tradition, it is important to recognize that not all forms of what we may contemporarily understand as "compassion" necessary appear in the Buddhist tradition under the term *snying rje*. For example, the idea of "self-compassion" would be included within a western understanding of compassion, and indeed has become a popular term recently in the emerging field of contemplative studies (Neff, 2005, 2007, 2011). While for researchers such as Neff self-compassion is typically understood as self-soothing and self-acceptance, Geshe Lobsang Tenzin Negi, developer of Cognitively-Based Compassion Training (CBCT), has drawn a link between self-compassion and the Buddhist idea of renunciation or *nges 'byung* (Ozawa-de Silva and Negi, 2013). For Negi, as expressed in the CBCT manual (Negi, n.d.), "self-compassion" is actually a translation of the Tibetan term *nges 'byung*. Yet the term "self-compassion" has no clear equivalent in Tibetan if we restrict our understanding of compassion to *snying rje*, since *snying rje* is always otheroriented and also since it is taken as axiomatic that all sentient beings desire their own happiness and wish to be free from suffering (Jinpa, 2006:536), meaning that it would not be desirable or necessary to cultivate such a wish.

Although renunciation and compassion may appear to have little in common, a deeper exploration of each concept reveals a number of key points of contact. The etymology of the Tibetan term typically translated as "renunciation" is *nges 'byung*, which points to a sense of certainty (*nges*) and arising or emergence (*'byung ba*). In the *lam rim* literature, a recurring theme is the need to pass through certain stages of spiritual development in a sequential order. This comes through most clearly in the ordering of the three types of persons (Tib. *skyes bu*), namely those who are lower (*dman*), medium (*'bring*) and superior (*mchog*). The division originates from Atiśa's *Lamp for the Path to Enlightenment* (*byang chub lam gyi sgron ma*), and subsequent *lam rim* authors follow suit in seeing the division between persons of lower and medium capacity as resting on whether or not one has cultivated renunciation (*nges 'byung*), and the division between persons of medium and superior capacity as resting on whether or not one has cultivated bodhicitta (*byang chub sems*) (Pabongka, 2006). The first division relates to how a person

of lower capacity, who has not yet generated the mind of renunciation, that is, a mind definitively set upon attaining liberation from *saṃsāra*, cannot yet be said to have entered the path to liberation, since they have not yet generated a sense of disillusionment or disaffection (*skyo ba*) with *saṃsāra*. Since the compassion associated with persons of greatest capacity requires these preliminary practices, one question to investigate is how the contemplations of the preciousness of finding a human rebirth, impermanence, karma, and the suffering of the lower realms lays a groundwork for the subsequent cultivation of compassion.

Just as interesting in terms of the study of compassion is the second division, and the fact that a person of superior capacity must necessarily pass through the medium stage first. It is often noted in *Lojong* and *lam rim* texts and commentaries that without first generating a sense of renunciation for oneself, the specific compassion for others that is sought in *Lojong* will not arise. For example, Atiśa writes in his *Lamp*:

Whoever, by means of the suffering they see in their own mind,

Truly desires to extinguish completely

All the suffering of others

Is a person of great capacity (Rinchen & Sonam, 1997).

Furthermore, "The Foundation of All Good Qualities," a brief *lam rim* text by Tsongkhapa, again makes a direct connection between recognition of one's own state in cyclic existence and the cultivation of *bodhicitta*:

Just as I have fallen into the sea of samsara,

So have all mother migratory beings.

Bless me to see this, train in supreme bodhicitta,

And bear the responsibility of freeing migratory beings. (FPMT, 2001).

Neither of the two main methods discussed in the *Great Treatise*, namely the "seven-limb cause and effect method" and the "equalizing and exchanging self and other method," explicitly include a process of generating renunciation in order to develop compassion, but that is because the topic of renunciation has already been covered earlier in the *Great Treatise* and is therefore presumed by this point. If the compassion that is to be cultivated by persons of great capacity requires renunciation as an essential prerequisite, then it is worth exploring why this might be the case, as such an investigation would lead to deeper insight into the kind of compassion that is being cultivated, as well as the process through which it is cultivated.

In contemporary *Lojong*-based protocols like CBCT, self-compassion therefore is not limited to self-soothing behaviors or attitudes, but rather to the recognition that suffering comes not only from external sources, but also from one's own attitudes, cognitive and emotional distortions, and the behaviors that arise from them (Negi, n.d.). On the basis of this awareness comes a further recognition that such attitudes and habits can be transformed through practice and effort; once one then determines to engage in such transformation, self-compassion is generated (Negi, n.d.). When defined in this way, self-compassion in CBCT and the role it plays bears a strong functional resemblance to *nges 'byung* in traditional Buddhist *Lojong* practice.

Furthermore, self-compassion is typically taught before unbiased compassion for others, and there is typically an implicit or explicit assumption that self-compassion serves as a prerequisite for genuine unbiased compassion. The question of whether there is an adequate basis for this in the *Lojong* literature therefore naturally arises. Addressing

this requires a closer look at the role that renunciation plays in *Lojong* and its relationship to compassion. Is great compassion possible without renunciation and the practices that lead to renunciation?

On the surface it would appear that *Lojong* tradition contains a range of practices that are not specifically aimed at compassion, practices which could be understood on their own, and not merely within the context of the cultivation of compassion. One example of practices that are taught for the purpose of generating renunciation, but which do not appear to be directly connected to compassion, are the *blo ldog rnam bzhi* or "the four thoughts that reverse the mind." Practices and teachings in the Tibetan tradition are often referred to by the terms "common" (*thun mong*) and "uncommon" (*thun mong ma yin*). Common in this case means shared across traditions, while uncommon means particular or unique to a tradition. Thus, in terms of the three stages of a practicioner (small, medium and great), practices can be (1) common to all three, (2) particular to medium and greater stages only, or (3) particular to the highest stage only (Pabongka, 2006).

Generating Renunciation through the Four Thoughts as Preliminaries to Great Compassion

The *blo ldog rnam bzhi* or "four thoughts" refer to four contemplations that a practitioner should engage in to turn his or her mind away from cyclic existence and towards the practice of dharma. These four contemplations are: (1) contemplating the preciousness of this human rebirth; (2) contemplating death and impermanence; (3) contemplating the law of karma; and (4) contemplating the disadvantages of cyclic

existence (Jinpa, 2006:531-536; Pabongka, 2006). While they are necessary for practitioners to reach the great stage, they could also lead to less exalted endpoints. In this model, the practitioner at the beginner's stage seeks a better rebirth but has not yet developed renunciation, and the person on the medium stage has developed renunciation but not yet great compassion and the altruistic mind of enlightenment (*bodhicitta*).

The four thoughts are seen as helpful steps for generating renunciation, because they are intended to remove an ensnarement to temporary pleasures and to instill a sense of appreciation for the deepest, subtlest and most pervasive type of suffering, *khyab pa 'du byed kyi sdug bsngal* or "the pervasive suffering of conditioning." Only when that aspect of suffering is recognized can the practitioner generate the wish to be free from it, and this then serves as a basis for cultivating *bodhicitta*.¹⁷ Therefore, although the four thoughts appear unrelated to compassion, they actually serve as trainings that support the generation of compassion on its deepest level.

Once renunciation has been cultivated, the practitioner has generated a clear vision of his or her own state of suffering, its causes, the need to be free from those causes, the confidence that suffering can be overcome, the confidence that he or she can overcome suffering, and the determination to do so. This does not necessarily in itself lead to great compassion for others, from a *Lojong* perspective. If it did, the *Lojong* practices outlined above would be unnecessary. But it does certainly serve as a basis for

¹⁷ Pabongka writes, "when we have gained some insight into renunciation, we must then definitely enter the Mahāyāna path. We train the mind according to the part of the path we share with the medium scope expressly so as to develop renunciation in our mindstreams, not actually to tread the medium-scope path. Training in bodicitta in accordance with the great-scope section is the main body of the path; the small and medium scopes are an introduction, a supplement to the general tasks [of a bodhisattva.]" (Pabongka 2006: 501).

further *Lojong* practice and its aim of generating great compassion. If practitioners have not generated a sense of urgency and fear when regarding the situation of cyclic existence into which they have fallen and in which they are stuck, it is unlikely for them to be able to feel a sense of urgency and fear when regarding other sentient beings who are stuck in the same situation. From a *Lojong* perspective, not feeling any sense of urgency and fear when contemplating the nature of cyclic existence results from a kind of blindness or ignorance (Pabongka, 2006). Practitioners who are blind to the precariousness of their own situation could never be considered insightful regarding the situations of others.

One of the quotes often used to back up this line of argument, rightly or wrongly, is a verse from Santideva's *Bodhicaryavatara*, a key Indian source text for the Tibetan *Lojong* tradition, in which he writes, "For in the past they never, even in their dreams, conceived such profit for themselves. How could they have such aims for others' sake?" (Śāntideva, 1997, 1.24). This verse is sometimes used to argue that if one does not have the concept of attaining full enlightenment for oneself (i.e. at least the concept of bodhicitta), it would not be possible to wish this for others. One could then argue that since the wish to attain full enlightenment is predicated upon a wish to be free from cyclic existence, and the full manifestation of that wish requires the insights that are brought by the "four thoughts," these would, in effect, be prerequisites for *bodhicitta*. When read in context, however, it is not clear that this verse supports such an interpretation so clearly. Sāntideva is writing in the previous verse about the gods, sages, and Brahma, so it appears that he is referring to them, and not to practitioners, when he says that they have never conceived of such a thing as *bodhicitta*. Moreover, the whole context of the passage of the first chapter is on the benefits and great qualities of

142

bodhicitta, not the need for renunciation in order to cultivate *bodhicitta*. Still, the beginning of the following verse does seem to support the common interpretation. Śāntideva writes: "For beings do not wish their own true good, so how could they intend such good for others' sake?" (Śāntideva, 1997, 1.25).

The "four thoughts" (*blo ldog rnam bzhi*) are considered important preliminary practices by all four major traditions of Tibetan Buddhism (Nyingma, Kagyu, Sakya and Gelug) (Jinpa, 2006). It is worth pointing out that the idea of a reversal or turning around is a very common theme in religious practices even beyond Buddhism, and is in fact the very meaning of the Greek term *metanoia*, an important concept in Christianity. Most commonly translated as "repentance," *metanoia* in fact literally means a "changing of one's mind" or a "turning around" and has been employed by philosophers as well as theologians (Wirzba, 1995). It would appear to be a common theme in contemplative traditions that people have mental dispositions that are distorted and therefore cause suffering, and that these need to be reversed if they are to achieve greater happiness and spiritual well-being. Therefore, the four thoughts are normative and ethically grounded practices from the very beginning, and this will be important in our later discussion of their relevance for the cultivation of compassion.

One popular and short text from the *lam rim* and *Lojong* tradition that devotes a verse to each thought is Tsongkhapa's *The Foundation of All Good Qualities*. After explaining that reliance on the guru or spiritual teacher is the foundation of all good qualities, Tsongkhapa then instantly turns to the four thoughts. This would seem to imply two things: first that the four thoughts are highly important, since they are included in full in such a short text (the entire text is 14 verses long, and the four thoughts therefore take

143

up almost a third of the entire text), and secondly that they are close to the foundation, or close to the beginning of one's spiritual practice, since they are placed immediately after guru reliance, which is considered the absolute foundation. The verses read:

Understanding that the precious freedom of this rebirth is found only once, Is greatly meaningful and difficult to find again, Please bless me to generate the mind that unceasingly, Day and night, takes its essence.

This life is as impermanent as a water bubble; Remember how quickly it decays and death comes. After death, just like a shadow follows the body, The results of black and white karma follow.

Finding firm and definite conviction in this,Please bless me always to be carefulTo abandon even the slightest of negativitiesAnd accomplish all virtuous deeds.

Seeking samsaric pleasures is the door to all suffering; They are uncertain and cannot be relied upon. Recognizing these shortcomings, Please bless me to generate the strong wish for the bliss of liberation. (Zopa Rinpoche, 2006) Tsongkhapa's text is useful because it not only outlines the contemplations themselves, but also what their intended results are supposed to be. For example, he writes that contemplating the rarity and preciousness of one's present human life will, in part through the blessing of one's teacher, yield the result of an attitude that strives unceasingly to extract the essence of that life, i.e., to practice dharma and not waste time in other, less meaningful, pursuits. Contemplating the preciousness of this human rebirth, it would appear, is intended to make the practitioner realize that they have been afforded a once-in-a-billion-lifetimes opportunity by having had the good fortune to be born as a human being among all the possible rebirths one could take, and not only a human being, but one endowed with the "eight leisures and ten good fortunes," namely the conducive conditions that enable one to practice dharma.

Of course, if that life were not temporary, then one could put off spiritual practice. The second contemplation, on death and impermanence, is typically taught as including reflections on how death is a certainty for us, the time of death is uncertain, and when death comes, we will not be able to take anything with us (friends, possessions, reputation) besides the karma we have generated (our actions and our mental predispositions). Tsongkhapa describes these in greater length in his *Great Treatise* (Tsongkhapa, 2000:143-160), where he quotes Kamaba (*ka ma ba*) as saying, "Now we should be frightened by death. At the time of death we should be fearless. But we are the opposite—we are not afraid now and at the moment of death we dig our fingernails into our chest." This illustrative quote shows three things. First, the short-term intended outcome of this practice is in fact fear. Kamaba, and by extension Tsongkhapa, says that we *should* feel fear now, and a contemplation of our impending death, our susceptibility

to death, and the uncertainty of it all would indeed appear to serve to strike fear into the hearts of those who would attempt it. But, secondly, Kamaba also says that the long-term intended outcome of the practice is to *not* fear death.

One could interpret this in various ways. Possibly a practitioner who engages in this practice will feel fear in the short term, but will then, spurred on by that fear, proceed to change his or her attitudes and actions towards a way that is conforming to dharma, and will engage in dharma practice. Then, when death does come, the practitioner will not fear death, both because he or she has lived a life according with dharma, and because of having familiarized his or her mind with the reality and inevitability of death, such that it does not come as an unexpected shock. The intended outcome of this one of the "four thoughts" is therefore indeed a full reversal from an ordinary state of mind: from not fearing death now but fearing it when it comes, to fearing death now and not fearing it when it comes.

In his *Jewel Ornament of Liberation*, Gampopa similarly devotes a lengthy section to this "thought," providing extensive lists of reasons to show that the practitioner will "definitely die, the time of death is uncertain, there will be no help when death occurs." (Gampopa, 1998: 86) In fact, the length and detail that Gampopa goes into is itself instructive, especially when one considers that hardly anyone would argue with any of his points. After all, is it not common knowledge that all human beings will die, that time passes continually and without interruption and therefore that life is continually running itself out, and that many things (even food, if it is poisoned or gone bad) can cut short our health and life—all things that Gampopa spends a great deal of time explaining? Gampopa furthermore suggests that his readers practice impermanence by applying it to

others, and explains that this means "observing another who is dying," that is, noticing how a healthy person who is caught by a deadly disease quickly deteriorates, loses color in their face, loses strength, and suffers unbearably. The practitioner should then think, "I am also of the same essential nature, in the same condition, and have the same character. I am not beyond this reality" (Gampopa, 1998:90). The obvious conclusion to be drawn from this is that although such knowledge is indeed commonplace on a highly abstract or conceptual level, it is not sufficiently grounded in a person's understanding to effect a change in behavior. It is highly unlikely that Gampopa is trying to introduce these thoughts as if they were new: rather, he appears to be suggesting that one engage in a thorough-going form of analytical meditation whereby these thoughts become deeply internalized, thereby reversing one's natural tendencies to push away or downplay thoughts of impermanence and death.

Gampopa concludes the section by explicitly mentioning the beneficial outcomes that should come from this process of contemplation. "Awareness of the impermanence of all composite phenomena leads one to release attachment to this life. Further, it nourishes faith, supports perseverance, and quickly frees one from attachment and hatred. It becomes a cause for the realization of the equal nature of all phenomena" (Gampopa, 1998:91). The note on releasing attachment to this life recalls what we have discussed above: that the four thoughts are principally aimed at turning the mind away from cyclic existence and towards liberation (a mental state of renunciation). Within the context of our discussion of what role they might play in compassion, however, we also see that meditation on impermanence "frees one from attachment and hatred" and leads to equanimity. Since a leveling out of individuals and a cultivation of equanimity is essential for all compassion practices in the Mahāyāna tradition, it would appear therefore that meditation on impermanence could play a very important supplemental role in the cultivation of compassion.

The third thought, that of contemplating the law of karma and the inescapable relationship between cause and effect, and the fourth, that of contemplating the disadvantages of cyclic existence, also point to the existential situation of the practitioner, who is caught in cyclic existence and whose existence is characterized by constant uncertainty as long as he or she is not free. Indeed, a strong parallel could be drawn here to existentialist philosophy and theology, such as the work of Tillich (1973, 1975, 1976), Kierkegaard (1983) or Buber (1958)—that is, those existentialists who contemplated the existential predicament of humankind, but who did not thereby reach a conclusion of absurdity or nihilism. This is because, despite the potentially depressing nature of these thoughts and one's predicament, the outcome of such reflections is essentially pragmatic and practical. In the section of *The Foundations of All Good Qualities* quoted above, Tsongkhapa notes that meditation on karma should result in becoming careful to always avoid even slight negativities and accomplish good deeds, and that meditation on the shortcomings of cyclic existence should lead one to generating "the strong wish for the bliss of liberation," i.e. renunciation.

The fact that the four thoughts can have both sobering and uplifting effects on the mind was not lost on Tibetan Buddhist contemplatives, and in fact leads us to another use of the four thoughts, namely their extension to the important practice of achieving calm abiding (Skt., *śamatha*) and meditative stabilization (Skt., *samādhi*). Drawing from the treatises of Maitreya, the Tibetan tradition teaches that there are five obstacles to the

148

attainment of śamatha: laziness, forgetfulness, laxity and excitement (treated together as one obstacle), non-application of the antidotes, and over-application of the antidotes (Denma Locho Rinpoche & Lati Rinpoche, 1983). Since one of the chief causes of excitement (Tib., *rgod pa*; Skt., *auddhatya*) is attachment, particularly attachment to mundane things, the four thoughts (in particular contemplating suffering and impermanence) are recommended to weaken the practitioner's attachment and also lower his or her state of mind, in effect depressing it. Alternatively, if the practitioner's mind is afflicted by laxity (Tib., *bying ba*; Skt., *laya*), the four thoughts (in particular the preciousness of this fortunate rebirth) can be used to heighten his or her state of mind. Examples such as the following are often given for this in *lam rim* texts:

Excitement is caused by something that pleases the mind. An example is found in a story concerning the Buddha's father... Though the others realized the doctrine and the fruit of Buddha's teaching, Buddha's father did not because he was too happy to see his son. Therefore, Buddha set forth for his father a means of lessening this joy, and his father was able to attain the fruit of Stream Enterer... In coarse excitement, we should reduce the mind's elation... we should meditate on such topics as death and impermanence; and on the suffering of cyclic existence in general and of the bad transmigrations in particular—topics that cause the mind to be slightly sobered. (Denma Locho Rinpoche & Lati Rinpoche, 1983:63)

When the mind is too withdrawn or depressed, the practitioner is instructed to meditate on something that will uplift the mind, and here the first thought—that of the preciousness of this human rebirth—is often suggested. We can thereby infer that one

intended outcome of this first thought is to elate the mind: the practitioner should feel a great sense of good fortune at having acquired such a rare and precious opportunity to engage in dharma practice and free him- or herself from the bonds of suffering.

As mentioned, in *Lojong* literature, as in *lam rim* literature in general, a recurring theme is that practitioners must pass through certain stages of spiritual development in a sequential order, specifically the three types of persons (Tib. *skyes bu*): those who are on a lower (*dman*), medium (*'bring*) or greater (*mchog*) level of spiritual development, a model which comes from Atiśa's *Lamp* (Rinchen and Rinchen, 1997). Geshe Chekawa's *Seven Point Mind Training* (*blo sbyong don bdun ma*) emphasizes in its very first sentence the need of practicing the preliminaries, which he calls "the foundation" (*rten*): "First, train in the preliminaries, the basis of practice" (Jinpa, 2006).

Se Chilbu's commentary then explains that this means that a person must "train the mind in stages in the three persons" (*skyes bu gsum la blo rim pas sbyangs nas*), meaning the three stages of spiritual development outlined above. (Jinpa, *theg pa chen po blo sbyong brgya rtsa*, 2004:43). Since the four thoughts are practices that are central to such training, it would appear that Se Chilbu and Geshe Chekawa believe that the four thoughts constitute an important foundational practice for the cultivation of the compassion that is the object of *Lojong* practice. Similarly, Atiśa's *Lamp* contains the verse "Whoever, by means of the suffering they see in their own mind, truly desires to extinguish completely all the suffering of others is a superior person" (Rinchen and Rinchen, 1997). And we have already noted the relevant verses from Śāntideva's text above. All of this supports a very close connection between renunciation and compassion—not just any form of compassion, but the compassion that is the object of cultivation in *Lojong* practice. The goal of *Lojong* practice is the cultivation of a firm determination to attain the state of full enlightenment in order to help all sentient beings and to bring them to that same state (Jinpa, 2006). As we have seen, the great compassion on which *bodhicitta* is founded cannot arise without a deep understanding of the existential situation in which sentient beings find themselves in, because it is that very existential situation that the bodhisattva wishes to save them from. And such a deep understanding is unlikely to arise without the practitioner having first contemplated the nature of that existential situation, which is encapsulated in the four thoughts.

Conclusion

This chapter presented the types and components of compassion in the *Lojong* tradition by examining key sources within that tradition. Other sources not generally considered part of the *Lojong* tradition, such as sources from the Pali canon and the Dzogchen tradition, were also briefly examined for the purposes of comparison. Three main types of compassion were examined: a general compassion that can be accompanied by bias; immeasurable compassion; and great compassion. It was shown that one of the key aspects of immeasurable compassion that separates it from a base-level compassion is the aspect of impartiality and an attempt to break out from ingroup/outgroup bias such that compassion is felt towards all. For the *Lojong* authors considered here, however, that in itself is insufficient for Mahāyāna practice and must be combined with a special state

of mind and motivation that actively takes responsibility for the welfare of others at the deepest level.

Two particular components for compassion were also examined: an ability to identify with or feel affection for others, and an ability to see others' suffering. *Lojong* contains techniques for enhancing both of these components. The first step towards enhancing the former is through practices that equalize self and other, focusing on what contemporary authors call our "common humanity," but what traditional *Lojong* authors saw as a common existential experience: that we all want happiness and to avoid suffering.

The second component, that of seeing suffering, can be enhanced through a recognition that suffering can be conceptualized as being much broader than immediate, obvious, or "manifest" suffering such as a headache or heartbreak. Three levels of suffering are presented in the Buddhist tradition, and compassion towards such levels of suffering can only be cultivated by someone who is able to understand each one. This explains why the cultivation of renunciation is so important as a precursor to the generation of great compassion. At its core, as we have seen, renunciation is recognizing suffering at its deepest levels and resolving to free oneself from all causes of suffering. This examination further illuminated the role that "self-compassion" plays in contemporary secular *Lojong*-based protocols. As a creative translation of *nges 'byung*, typically translated as renunciation, self-compassion points to this need for recognizing deeper internal causes for suffering within the mind and resolving to transform them. It therefore plays a very similar role functionally to that of *nges 'byung* in traditional *Lojong* practice.

As contemplative science develops, it would be very helpful to investigate the connections made here empirically. Although the scientific study of compassion is progressing, it remains at a very early stage, and synthetic accounts that attempt to bring traditional and contemporary paradigms together related to compassion and its cultivation are few and far between, with notable exceptions such as Gilbert (2005, 2010) and Singer and Bolz (2013). Present studies of compassion are still far from being able to provide us with a clear picture of the relationships between practices such as the "four thoughts," the mind of renunciation, and the various types of compassion. In this section, however, I have attempted to show that an inclusion of these other practices enriches our understanding of compassion, at least as it is understood and practiced in the *Lojong* tradition, and helps us to understand compassion as a richer concept with multiple levels, facets, and subcomponents.

Contemporary secular approaches to the cultivation of compassion that arose from Tibetan Buddhism, such as CBCT (Negi, n.d.), CCT (CCARE, 2009) and John Makransky's Innate Compassion Training (ICT) (Makransky, 2007, 2013), do not foreground the "four thoughts," yet one can certainly find marks of these preliminaries in each of these contemporary programs, especially in their elucidation of "self-compassion." Each of the contemporary programs reflects the core *Lojong* idea that great compassion is better cultivated not directly, but through an approach that builds up to it, although they differ significantly in the form that the specific preliminaries take, the role of analysis and conceptual thought, and the relationship between compassion and ultimate reality. On the basis of the general presentation and arguments provided in this chapter, we will return to these differences in subsequent chapters.

CHAPTER FOUR:

LOJONG AND CONTEMPLATIVE PHENOMENOLOGY

The preceding chapters have included an examination of compassion and its cultivation as presented within the *Lojong* tradition. This was done on the basis of a selected reading of *Lojong* texts, chosen for the reason that they have been deemed particularly important in the current appropriation of *Lojong* for secular meditation practice. Furthermore, the cultivation of compassion in Lojong has been placed within the two related contexts of contemplative science and positive psychology, and the potential of a relationship between these two developing fields has been explored. I have argued that contemplative science will develop best if it navigates between a materialistic pole that submits humanistic traditions attentive to first-person experience to a rigidly thirdperson scientific approach, as represented by Slingerland (2008a, 2008b, 2008c), and the opposite ideological pole that would submit third-person scientific inquiry to a particular interpretation of the Buddhist tradition (or any such tradition), as represented by Wallace (2007, 2008). I also argued that attention to the *Lojong* tradition can help us expand contemplative science well beyond contemporary definitions of "mindfulness" to include analytical and more obviously normative practices. I have noted that in both traditional Buddhist practice and in contemporary meditation protocols based on *Lojong*, the wider contents of mindfulness include a strongly normative dimension, thereby tying mindfulness to an explicitly ethical and teleological project.

These conclusions will be expanded upon in the present chapter. Like the previous chapters, this chapter explores the implications of a close reading of key *Lojong*

texts for the emerging field of contemplative science. Here I propose that a close reading of these texts reveals an implicit phenomenology. This is not necessarily a phenomenology identical to the western philosophical tradition of phenomenology, but I will argue that it is a kind of phenomenology nonetheless. Moreover, I argue that the implicit phenomenology in the *Lojong* tradition can, when placed in conversation with the development of the western philosophical tradition of phenomenology, serve as the basis for elucidating the characteristics of what I will call a "contemplative phenomenology." The function and importance of a contemplative phenomenology can be best understood within the context provided by the earlier chapters of this dissertation. Firstly, it provides a way of navigating between the two poles of first-person and thirdperson experience, helping us navigate the space between traditional science and traditional contemplative traditions. Secondly, it brings attention to subjective experience, something too often ignored in both positive psychology and contemplative science.

Researchers and scholars in contemplative science have expressed great interest in the idea of "neurophenomenology," a pairing of first-person report with third-person observation methods, such as neuroimaging, first elucidated by Francesco Varela (Varela 1996; Varela et al., 1991). Varela was explicit about the type of phenomenology he believed most suited for this project, concentrating on the work of Maurice Merleau-Ponty (1962, 1964). Since then, however, many proponents of the idea of neurophenomenology in the study of contemplative practices (Mackenzie et al., 2014) with notable exceptions, such as Thompson (2007)—have not been clear on which aspects of the phenomenological tradition would be best suited for the neurophenomenological project of pairing first-person and third-person accounts. Furthermore, scholars who emphasize the interdependent and co-constructed nature of selfhood have criticized traditional phenomenological approaches as still being rooted in a fundamentally egocentric model of independent, autonomous selfhood (Rochat, 2009a).

Without being specific about the type of phenomenology to be employed and the specifics of a phenomenological approach, the exact methodology of the first-person side of neurophenomenology—and by extension contemplative science—remains vague. A problem that needs to be addressed in contemplative science is that the third-person investigation of phenomena can be as sophisticated as the scientific discipline engaging in it allows: be it through behavioral measures, neuroimaging, or physiological measures. For such study, scientists have established methods that are widely agreed upon and easily communicated, even across disciplinary boundaries. This does not hold true for first-person accounts. The presumed advantage of doing neurophenomenology within contemplative science is that it involves practitioners who have been highly trained to attend to the nature of experience and the structures of consciousness (Lutz and Thompson, 2003; Varela, 1996; Varela et al., 1991). We would therefore want an equally sophisticated understanding of the contemplative practice and process itself, including the first-person observation of experience, to go alongside the sophisticated third-person methods we are employing. At present, however, it is this side that remains undertheorized, with no clear consensus with regard to methods or theory.

It is sometimes assumed that the Buddhist tradition, with its long history of examining first-person experience, has equivalent models that can simply be joined with third-person scientific models. As we have seen, this is what is implied in works such as Wallace (2007, 2008). This is not at all a simple task, however. Apart from the problem

156

of connecting first-person and third-person accounts, which is significant, a further problem is that the frameworks within which Buddhist models of experience exist differ significantly from those of the scientific models. A translation process is therefore necessary. As a western discipline that takes seriously the question of first-person experience, phenomenology can play a role in mediating this divide, but if it is to do so, we must investigate some of the strains of phenomenology and decide what type of phenomenology, as the tradition has developed in the west, may best be suited to the project of contemplative science, or whether an altogether new strain of phenomenology should ultimately be established.

In this chapter, I argue that by reading the *Lojong* tradition, we can construct a contemplative phenomenology that has several distinct features, that aligns itself with certain aspects of the western phenomenological tradition and not others, and that can serve as a more solid basis for the emerging project of neurophenomenology, which itself comprises a very important part of the emerging field of contemplative science. I first examine the *Lojong* texts in question to reveal statements that suggest an implicit contemplative phenomenology, and then explain the features whereby one can recognize such statements in these and other texts. I then attempt to situate this emerging contemplative phenomenology within the western phenomenological tradition by addressing one of the main divides in phenomenology, regarding the interpretability of phenomenal experience. This aligns closely with my earlier critique of Proudfoot's (1985) clear demarcation between "description" and "explanation." Here, too, I will critique a phenomenological approach that attempts to draw a firm division between direct, unmediated experience, and experiences that are filtered through the lens of a

mutable subjectivity. My argument will be that the former does not stand up to critique, even before one raises the question of contemplative phenomenology. Once one does raise the issue of contemplative phenomenology, I will argue that the position of direct unmediated experience of others' emotions is also contrary to the strain of phenomenology we find in the *Lojong* tradition. I will therefore conclude by arguing that a hermeneutical phenomenological approach stands in far better alignment with contemplative phenomenology, and is therefore the more appropriate approach to use in constructing a neurophenomenology for contemplative science.

Without resolving such issues, the progress of contemplative science will be stifled. This can be seen in other disciplines that have adopted phenomenology as a methodology, such as nursing and anthropology. In these disciplines, critiques have been raised regarding the need to clearly identify which aspects of the phenomenological tradition are being adopted, since different approaches will yield different results (Desjarlais and Throop, 2011; Lopez and Willis, 2004; Reiners, 2012). Lastly, I believe that placing contemplative phenomenology in the mix of western phenomenological debates sheds light on both traditions; the western philosophical tradition of phenomenology can help us understand *Lojong* practice, and the contemplative phenomenology implicit in *Lojong* and other contemplative traditions may gradually change the course of the development of western phenomenology.

Discovering a Contemplative Phenomenology in the Lojong Tradition

In this section I will seek to unpack the implicit contemplative phenomenology found within certain important *Lojong* texts, concentrating specifically on Tsongkhapa's

(2004) *Great Treatise* (*lam rim chen mo*), Pabongka's *Liberation in the Palm of Your Hand* (Pabongka, 2006),¹⁸ and Se Chilbu's commentary to *Seven Point Mind Training* (*blo sbyong don bdun ma*) (Jinpa, 2006). These texts are selected because they are considered to be among the most important texts for the Gelugpa understanding of compassion and its cultivation, at least as presented by those most involved in the promotion of *Lojong*-based compassion training in the west.¹⁹

When seeking to define compassion and describe the methods for cultivating it, these *Lojong* authors first turn to scriptural sources: the words of the Buddha, of the great Indian masters such as Śāntideva, or preferably both. In the section of the *Great Treatise* that explains how compassion is the entrance to the Mahāyāna, Tsongkhapa quotes from a wide variety of sources that include sutras as well as the writings of Candrakīrti, Śāntideva and Kamalaśīla (Tsongkhapa, 2004). From the fact that Tsongkhapa rarely comments on the quotes themselves, and often builds his own arguments on the basis of these quotes, we can infer that he treats these sources as authoritative and expects students to relate to them in the same way. Similarly, in *Liberation*, Pabongka begins the section on the cultivation of *bodhicitta* through the seven limb cause and effect method

¹⁸ In Tibetan *rNam sgrol lag bcangs su gtod pa'i man ngag zab mo tshang la ma nor ba mtshungs med chos kyi rgyal po'i thugs bcud byang chub lam gyi rim pa'i nyams khrid kyi zin bris gsuns rab kun gyi bcud bsdus gdams ngag bdud rtsi'i snying po*, which translates as "A Profound, Completely Unmistaken Instruction for Conferring Liberation in the Palm of Your Hand, Pith of the Thoughts of the Unequalled King of the Dharma [Tsongkhapa], the Written Record of a Concise Discourse on the Stages of the Path to Enlightenment, Pith of All Scripture, Essence of the Nectar of Instructions" (Pabongka, 2006:1).

¹⁹ This is based on personal communication with Geshe Lobsang Tenzin Negi, developed of Cognitively-Based Compassion Training (CBCT) and Geshe Thupten Jinpa, developer of Compassion Cultivation Training (CCT). His Holiness the Dalai Lama also teaches regularly on *Seven Point Mind Training*.

with a quote from Śāntideva, followed quickly by quotes from Dharmakīrti and Nāgārjuna (Pabongka 2006:521-524).

Authoritative scriptural sources are the first foundation by which these *Lojong* authors present *Lojong* practice. Reasoning is the second, and these two methods are often combined. For example, in encouraging students to recognize that all sentient beings could have been their mother, an important step in the seven limb practice called *mar shes* (seeing or recognizing as mother), Pabongka first quotes from Nāgārjuna:

If you counted all your mothers

With juniper-berry-sized balls of earth... (Pabongka, 2006:523).

The full quotation is not given, presumably because his audience would have known the rest of the passage, which goes on to say that the earth would not be enough to contain all these berry-sized balls. After quoting this passage, however, Pabongka largely uses logical reasoning to explain to the students why all sentient beings can be seen as having been their mother, due to the fact that they have been born in all manner of states and locations since beginning less time. It is not necessary to go over the entire argument here. The important point is that the rhetoric being used to support the quote here is the language of logic, as shown by statements such as: "If all sentient beings had not been your mothers, there would be a discrepancy," and "Thus, if all sentient beings had not been your mother countless times, there would again be a discrepancy. All sentient beings, therefore, have been your mother, and many times over at that" (Pabongka, 2006:523-524).

Logical reasoning and authoritative quotes from scripture are not the only styles of rhetoric used in *Lojong* texts, however; there is a third style of rhetoric that appears as

160

well. We can call these passages "phenomenological accounts" because they describe experiences, structures of consciousness, or transformations of subjectivity. To understand these accounts, it is important to note that *Lojong* texts are practice-oriented, and Lojong authors often exhort their students to practice. "Practice" is of course a broad category and can include the memorization and recitation of texts, debate, body practices such as prostration, or ritual practices that confer a special status on the practitioner (Harvey, 2012). All of these practices relate to *Lojong*: texts are to be memorized; prostrations and offerings are to be made; the bodhisattva vows are to be taken; and so on. All of these practices are considered to effect changes as well. Yet as we shall see, they are generally viewed as supplemental practices to the principal practice of cultivating compassion through what I will argue is essentially a phenomenological process, namely specific operations on the structures of consciousness. This involves paying attention to one's experience, noticing recurring features of experience, enacting specific procedures to change the structures of experience, and then attending again to see what changes have or have not been effected. As will be shown in the following sections, the operations are to be effected in very specific ways, they are to have very specific results, and whether one has succeeded or not in effecting these operations is to be judged according to very specific criteria.

Therefore, following the quotes from Sāntideva, Dharmakīrti and Nāgārjuna, and following his passage of logical reasoning, Pabongka then exhorts his students to do meditation. Importantly, he points out that the *lam rim* texts he is basing his teaching on, such as the *Easy Path* and the *Swift Path* "deal only briefly with how to meditate on the understanding that these beings have been your mother." Therefore, he states, "I shall

expand this heading using instructions, the hard-wrought inheritance of my guru." (Pabongka, 2006:524) This is the first indication that we may be getting an account that is from the personal experience of a meditator, rather than an authoritative scriptural source. This impression is reinforced when Pabongka goes on to exhort his students to practice meditation on this topic of *mar shes*: "If the practices are not to degenerate, it is vital that people who practice regularly or who have made the teachings their responsibility should, in order that the practices not decline, do the following meditation, which greatly facilitates people's development of realization of the lam rim." (Pabongka 2006:524).

What is especially important is how this section concludes. After giving the specific instructions on how to do the meditation of *mar shes*, Pabongka says, "Here is the criterion that determines whether you have developed this understanding after repeated training: if you see a sentient being—even an ant—you will involuntarily remember that you were once that being's child and that all your happiness and suffering depended upon it." (Pabongka 2006:525). This is an interesting passage because it is neither a quote from an authoritative scriptural source, nor is it the result of logical reasoning. Rather, it is a phenomenological account of how things *will* appear to a practitioner who has engaged in this meditation practice for a sufficient amount of time. Moreover, it assumes that this experience will *not* arise for practitioners until they have reached a sufficient level of realization through their practice. Before reflecting further on the implications of these points, it will be helpful to look first at more examples.

In the *Great Treatise*, Tsongkhapa writes, "Once your mind is moved by great compassion, you will definitely make the commitment to free all living beings from cyclic existence. If your compassion is weak, you will not." (Tsongkhapa 2004: 28) Here

162

again we find a claim that is not being argued for on the basis of reason or scripture, but rather presents itself as stemming from personal experience, or a repository of personal experience. The implication is therefore that such statements stem from the phenomenological account of the author of the text or possibly from some kind of traditional—possibly oral—repository of phenomenological accounts that, while unwritten, nevertheless serves as a basis of authority for claims about *Lojong* practice. What is most relevant is to see that rhetorically such passages stand out from scriptural citation and logical reasoning, and that they function in the way similar to how phenomenological accounts would in a western philosophical tradition.

A few further examples will help illustrate this point. Tsongkhapa writes, "when you repeatedly reflect on the benefits of cherishing others, you produce powerful enthusiasm from the depths of your heart." (Tsongkhapa 2004:56). Elsewhere, he writes:

Reflect thoroughly on the benefits of being other-centered and the faults of being self-centered. Thereby you will produce from the depths of your heart a great delight in meditating on the exchange of self and other. Then recognize that you can actually generate it once you have become habituated to it. (Tsongkhapa 2004:53)

In another instance of this, he writes, "If you are controlled by this wrong way of thinking [that your body and resources are for your benefit alone, rather than for others' benefit], it produces only unbearable suffering." (Tsongkhapa 2004:56)

Pabongka's *Liberation*, Tsongkhapa's *Great Treatise*, and other major *Lojong* texts contain several such examples of how one's perceptions, cognitions and emotions will be changed through specific practices. These examples are not incidental, but rather

play a central role in the texts. Frequently, as in both the passage by Pabongka above and the one by Tsongkhapa, the author points out these results so that the student will be able to recognize when a practice is succeeding or has succeeded. For the phenomenological project to succeed for the student, she needs to be able to recognize not just what to practice in the abstract, but when to practice it, in what order, and how to know when one stage has been accomplished so that the next stage can begin. Both texts are filled with examples that follow an "if... then" (or "when... then") structure. This is a structural feature that I have elsewhere labeled with the tentative term "embodied cognitive logics," not in the rigid sense of a formal logic, but in the sense that the relationship between states of embodied cognition and affect are structured in generally predictable ways (Ozawa-de Silva, 2014a). This definitely appears to be the assumption of the authors of these *Lojong* texts.

These "if...then" constructions apply both to proper and improper forms of practice. After noting that the student must begin by cultivating compassion toward specific individuals and only then expand her meditation to include all sentient beings, Tsongkhapa writes,

If you train in these attitudes of impartiality, love, and compassion without distinguishing and taking up specific objects of meditation, but only using a general object from the outset, you will just seem to generate these attitudes. Then, when you try to apply them to specific individuals, you will not be able to actually generate these attitudes toward anyone. (Tsongkhapa 2004:44)

In addition to presenting a host of "if...then" constructions, Tsongkhapa is careful to point out traps that could ensnare a practitioner along the way and thereby prevent real progress. He is at pains to note that a mere thought or instance of compassion is not enough to qualify as having cultivated it in the way that *Lojong* envisions. In writing of *bodhicitta*, for example, he notes:

So, suppose that you are not anywhere near these objectives and that you give rise to the mere thought, 'I will attain buddhahood for the sake of all living beings, and in order to do this I will cultivate this virtue.' You may make the great error of entertaining the false conceit 'I have attained it' with regard to something you have not attained. If you then hold that the spirit of enlightenment is the core personal instruction, yet instead of training in it you search for something else and work on that, then you are only making a claim to have passed through many of the levels of attainment. If those who know the key points of the Mahāyāna see you doing this, they will ridicule you. (Tsongkhapa 2004:46).

Instead, Tsongkhapa notes that the virtues of *bodhicitta* and compassion must be sustained through long meditation practice, and not only in formal meditation sessions, but also in the important times between meditation sessions. For example, regarding the thought, "I will provide happiness and benefit to all living beings," he writes, "It is very effective if you practice this [thought] continuously, being mindful of it in all of your physical activities during the period of post-meditation and so on, not just during the meditation session." (Tsongkhapa 2004:47)

165

Furthermore, Tsongkhapa repeatedly emphasizes that neither knowledge of the scriptures on its own, nor personal practice and experience on its own, is enough to gain proper realization of compassion. He encourages students to meditate in detail on the one hundred and ten sufferings observed by compassion that are presented in Asaṅga's *Bodhisattvabhūmi*. The reason for this, he writes, is:

If you reflect from limitless viewpoints on how beings lack happiness and have suffering, you will develop much love and compassion. Moreover, if you think about this for a long time, your love and compassion will be strong and steady. Therefore, if you are satisfied with just a little personal instruction and neglect to familiarize yourself with the explanations of the classical texts, your compassion and love will be very weak. (Tsongkhapa 2004:45)

Study, meditation practice, and ritual practices must all go hand in hand in Tsongkhapa's mind. For example, he encourages studying texts before taking the bodhisattva vows:

In the discipline of individual liberation and in tantra it is inappropriate to study the precepts before you have first taken the vows, but these bodhisattva vows are different... It is most definitely necessary that you read this [how to take the bodhisattva vows, guard against transgressions, and repair degenerated vows] before you take the vows, so understand them from there. (Tsongkhapa 2004:102-3)

The conclusion one can draw is that both personal experience—through the practice of a Buddhist phenomenology—and textual study are requirements for the cultivation of the powerful, sustained and unbiased compassion that Tsongkhapa is advocating. It may be objected that one does not find extended phenomenological accounts of states like compassion in the *Lojong* literature. This is true, but one does find the traces of phenomenological accounts of processes and relationships between stages of practice. These traces appear in the margins of *Lojong* texts and yet nevertheless play an absolutely essential role. To my knowledge, no one has yet commented on these traces or drawn out the similarities they bear to phenomenology. Exploring these in greater detail would be a worthwhile further project, but based on the review above, we can already see that they are distinguishable from the scriptural sources and logical reasoning—the other pillars of *Lojong* practice—if one looks for them using the following clues. First, they do not appear in the form of quotes. Second, they are addressed directly to the student. Third, they are practice- and experience-oriented. Fourth, they describe in a detailed and specific way what the student will (or will not) experience, feel or perceive. Fifth, they give no clear justification for themselves, in that they do not rely on the authority of scripture or reasoning, and therefore appear almost *ex cathedra*.

The above evidence on its own would indicate at least an implicit phenomenology at work in these *Lojong* texts, but the evidence becomes stronger when we consider texts such as Se Chilbu's commentary to the classic *Lojong* text, *Seven Point Mind Training* (*blo sbyong don bdun ma*). Se Chilbu's commentary is fascinating for two reasons. First, it begins right from the start by explicitly pointing to a tradition (what we are saying is a proto-contemplative phenomenological tradition) that stands outside of scriptural authority and logical reasoning. Second, its descriptions of how to attend to the unfolding of phenomenal experience are more direct and clearly phenomenological than those we have seen up to this point.

Se Chilbu begins his commentary by noting that all the Buddhist vehicles greater, lesser, sutra and tantra—have but two themes: the elimination of self-grasping (*bdag 'dzin*) and the cherishing of others (*gzhan gces*). This is an interesting reduction already, but it is one that is characteristic of the *Lojong* tradition, which places the cultivation of altruistic compassion at the heart of the Buddhist path. He then takes a further step. He poses the hypothetical question, "Can these two points [or purposes, *don*] be practiced adequately on the basis of reading the treatises?" and answers, "No… they require dependence on the teachers' instructions." (Jinpa, 2006:87; Tibetan from Jinpa, 2004:41). He goes on to explain that this particular instruction was received by Atiśa from his teacher Serlingpa, who was not even a Buddhist by philosophical standpoint (Jinpa, 2006:88). Serlingpa's approach, Se Chilbu notes, in turn comes from the *Teachings of Vimalakīrti*, and he quotes from that text: "[Egoistic] viewing of the perishable composite is the 'bone' (essence) of the buddha."²⁰

This is certainly an unusual statement, since the perception (*lta ba*) of the psychophysical aggregates (*tshogs*) as being a self-sufficient or inherently existing person is what is traditionally presented in Buddhism as a fundamental form of ignorance that leads to suffering and rebirth (Engle, 2009). Se Chilbu explains this quote in the following way:

Just as a lotus does not grow out of a well-leveled soil but from the mire, in the same way the awakening mind is not born in the hearts of disciplines in whom the moisture of attachment has dried up. It grows instead in the hearts of ordinary sentient beings who possess in full all the

²⁰ 'jig tshogs la lta ba sangs rgyas kyi gdung yin no (Jinpa, 2004:41).

fetters of bondage. Therefore, in dependence upon this self-grasping, it is possible to cultivate the awakening mind that exchanges self and others, which is the uncommon cause for attaining buddhahood. This very selfgrasping is, therefore, the 'bone' of the buddhas. (Jinpa, 2006:88; Tibetan from Jinpa, 2004:41)

Se Chilbu again reiterates the point that this is something separate from the authoritative scriptures: "Atiśa is reported to have asserted that no remedy in either the Mantra or the Perfection vehicles can be an adequate substitute for entering the gateway of this spiritual practice" and quotes Atiśa as saying, "The little warm-heartedness that I possess is due to the kindness of my teacher Serlingpa. Because of this, my lineage has blessings." (Jinpa, 2006:89) The spiritual practice to which Se Chilbu is referring is the exchange of self and others, a practice that has textual sources (particularly Śāntideva's *Bodhicaryāvatāra*), yet that must, according to Se Chilbu, be learned through the lineage of instruction of teachers, and not from the sutras, tantras, or commentaries. One would think that this might lead to conflicting approaches, and indeed Se Chilbu points out right away that there are two alternative traditions here in the practice: one that says one must equalize first before practicing the exchange of self and others, and one that says that one must practice exchange "right from the start." (Jinpa, 2006:89)

Similar to the first two texts we examined—Pabongka's *Liberation* and Tsongkhapa's *Great Treatise*—Se Chilbu's commentary on *Seven Point Mind Training* contains many statements that appear very close to phenomenology, except here the accounts are even more explicit. The root text contains the line "Train to view all phenomena as dreamlike" (*chos rnams smi lam lta bur bslab*) (Jinpa 2006:91, Tibetan form Jinpa 2004:44), to which he appends the commentary:

This entire world of the external environment and the beings within it, which are by nature mere appearances, are nothing but apparitions of your own deluded mind. Thus not even a single atom exists with a reality separate from the mind. When you examine thus, you will come to realize that even on the conventional level no referent of your awareness is established as possessing substantially true existence. Contemplate in this manner. (Jinpa, 2006:91)

Next he examines the line from the root text that reads "Examine the nature of unborn awareness" (*ma skyes rig pa'i gshis la dpyad*) (Jinpa, 2006:91, Tibetan form Jinpa, 2004:44). To this, he adds the commentary that the mind itself no longer exists in the past or future, and even in the present is devoid of color, shape, and location, cannot be found in the body, and lacks identifying characteristics. Therefore it "abides as primordially unborn" (Jinpa, 2006:91). Later, Se Chilbu instructs meditators to view phenomena that arise as being like "illusory horses and elephants" (Jinpa, 2006:92).

We can see from these texts that not only does the *Lojong* tradition include an implicit phenomenological approach, it also describes a very particular kind of phenomenology. The phenomenological project in *Lojong* involves not merely accounts of the way phenomena appear, but also the way they *should* or *will* appear to practitioners of a certain type, particularly those who are training or have trained themselves in the tradition. Phenomenology in *Lojong* exists within a different context to western phenomenology. Whereas the latter was initially conceived, at least by Husserl (1970), as

a way to offer a philosophical underpinning for modern science, the phenomenology apparent in the *Lojong* tradition exists within a broader soteriological project of transformation. It is therefore normative and teleological, aimed at the cultivation of a particular type of ethical subjectivity and, ultimately, enlightenment—a state of ultimate benefit to oneself and others. It promotes what Foucault calls "self-care" as a process akin to the employment of what Foucault calls "technologies of the self" and the process of "self-governmentality" (Foucault, 1997), topics to which I will return later. Furthermore, it focuses much more strongly than western phenomenology on the active reorientation of structures of experience and similarly emphasizes emotions and feelings, such as compassion, in a way that is largely lacking in western phenomenology. This warrants a comparison not only to western phenomenology, but also to contemporary scientific theories of emotions, which will be the topic of the next chapter.

Nevertheless, the process described by *Lojong* authors does appear to constitute a systematic study of particular types of consciousness, its structures, and objects of direct experience. It therefore has a strong claim to being called a type of phenomenology. It would perhaps be better, therefore, to call this particular type of phenomenology a "contemplative phenomenology" to draw attention to its normative, developmental, and teleological nature. If we do not feel that it can yet be considered a full phenomenology, we could see it as a "contemplative proto-phenomenology," that is, as the basis for the development of a full contemplative phenomenology that could then participate in the neurophenomenological project of contemplative science. I will return to consider the questions that these texts raise, but in the following sections I will explore how we might
situate this contemplative phenomenology within the tradition of phenomenology as it has developed in western philosophy.

Empathy and Interpretation in Phenomenology

If a contemplative phenomenology is implicit in *Lojong* texts such as the *Great Treatise* and *Liberation*, the question then arises: what type of phenomenology is it, when placed in conversation with the western philosophical tradition of phenomenology? Another way of asking this question, more broadly, is simply: how should a practitioner relate to his or her experience in *Lojong*? Are experiences to be taken at face value or are they to be interpreted? Does experience present itself unambiguously, or in a way that requires a hermeneutical approach? Is the nature of experience and the arising of phenomenal appearances static, or does it change through practice? Approaching scriptural sources without a hermeneutical approach might be considered naive in both modern scholarship and many strains of traditional Buddhist scholarship, yet when it comes to experience, a debate still exists within the phenomenological tradition.

Contemplative science is not the first field to wish to appropriate phenomenological approaches for the purpose of scientific or social scientific research. Similar moves have been made in anthropology, sociology and nursing (Lopez and Willis, 2004). In these disciplines, similar questions have arisen, generally framed in the following terms: among all the varieties of philosophical phenomenology, which phenomenological approach should be adopted for the purposes of research? Particularly these debates focus on the eidetic approach of Husserl (1970) as opposed to the hermeneutic approach of Heidegger (2008). We can anticipate from looking at these other disciplines that a similar debate may arise within contemplative science. Here, I seek to get that conversation started by asking which of the main phenomenological approaches examined by the social sciences aligns most closely with the contemplative phenomenology we find in the *Lojong* tradition. This question has obvious practical importance, since it will inform not only our understanding of the *Lojong* tradition itself, but also of any future project in constructing a neurophenomenology turn attention towards subjective experience, they approach the nature of that subjective experience in different ways, especially with regard to how fixed, as opposed to constructed, the nature of that perception is (Lopez and Willis, 2004). These differences then have significant implications for the transformation of subjectivity that I argue is at the heart of the contemplative process of *Lojong*.

There are as many varieties of phenomenology as there are philosophers whom we consider "phenomenologists." Moran (2000:3) notes that "It is important not to exaggerate, as some interpreters have done, the extent to which phenomenology coheres into an agreed method, or accepts one theoretical outlook, or one set of philosophical theses about consciousness, knowledge, and the world." Nevertheless, there is legitimate value in the phenomenological approach to the *how* of experience—the *way* in which phenomena present themselves in experience—and the manner in which this is illuminated by a suspension of the "natural attitude." No other discipline or branch of philosophy pays as close attention to experience in this particular way.

For Husserl, the "natural attitude" refers to an approach to experience that is prereflective and that implicitly takes for granted the reality of phenomena as external existents rather than as phenomena (Husserl, 1970). The phenomenological attitude, on the other hand, involves a suspension of the natural attitude, allowing a more direct approach to experience as phenomenal appearance. This aspect of Husserl's phenomenology does bear strong resemblance to *Lojong* practice, and we have seen the way Lojong texts exhort practitioners to change their relationship towards experience, particularly in terms of questioning the reality of that experience.

This is of even greater interest when informed by the approaches of Heidegger (2008) and Merleau-Ponty (1962, 1964), who stress the mutual co-constitution of subjective experience and the life world. Interestingly, Francesco Varela, a pioneer in contemplative science who developed the idea of neurophenomenology, pointed mainly to Merleau-Ponty, not Husserl, for the specific tradition of phenomenology that he felt would work best in conjunction with Buddhist contemplative practice (Varela et al., 1991). This is likely because Heidegger and Merleau-Ponty navigate Husserl's phenomenology away from problematic notions of transcendental subjectivity, selfhood, and objective essences (elements that can be seen as remnants of Cartesian dualism, and that are severely problematic from a Buddhist perspective) towards a recognition of how changes in experience are simultaneously transformations of subjectivity and the lifeworld that is its inseparable correlate. As Carman (1999) notes, Husserl's strict delineation of the immanent, inner sphere of consciousness and the outer, transcendent sphere of external objects leaves the body in an awkward in-between state, since "the body is precisely what orients us in a world in which we are able to individuate subjects and objects to begin with" (Carman, 1999:206). Varela's interest in Merleau-Ponty is likely because, as Carman notes, "Unlike Husserl, but like Heidegger, Merleau-Ponty

looks beyond the subject/object divide to try to gain insight into the concrete structures of worldly experience." (Carman, 1999:206).

One of the reasons why successors to Husserl's original phenomenological program (Husserl, 1970) may be more amenable to contemplative phenomenology is that they are suspicious of a presuppositionless approach to experience that somehow stands outside of the historicity of thought or that penetrates to the "essences" of phenomena. Such an approach appears to be seriously at odds with the *Lojong* tradition, which as we have seen holds (in common with other Buddhist traditions) that due to ignorance, cognition is distorted and fails to perceive phenomena as they are, and furthermore that this distortion pertains to the superimposition of "essence." One of the contributions that Heidegger (2008) makes to the phenomenological project is to move it away from Husserl's concern about essences towards a recognition of historicity, while preserving the main thrust of phenomenology, which is attention to the how of experience, that is, the manner in which phenomena present themselves. As Moran notes, "Human experience cannot be approached directly; indeed the phenomenon is even distorted when we attempt to reflect on it. The concept of what 'is' is usually taken from the theoretical standpoint, but in my 'factical' existence I have experiences which appear to me in my own way" (Moran 2000:223). Moran notes that Heidegger uses the term 'factical' (*faktisch*) to express "the particular, concrete, inescapably contingent, yet worldly, involved aspect of human existence in contrast to the 'factual' nature of inanimate existence" (Moran 2000:223). This movement by Heidegger can be seen, I would argue, as a movement away from a transcendent self to whom phenomenal experiences occur (a

view implicit in Husserl) towards a self that is co-constructed alongside and interdependently with experience and the lifeworld. We will return to this point later.

As mentioned, in addition to attending to the *how* of experience, the contemplative phenomenology of *Lojong* involves not merely describing but also transforming structures of experience through intentional and sustained contemplative practice. The descriptive phenomenological program set forth by Husserl, and the hermeneutical phenomenological program established by Heidegger, are elaborated in *Lojong* practice through the addition of a transformative phenomenological program aimed at investigating not only the nature, but also the developmental possibilities, of consciousness.

Interestingly, a strain of phenomenology has taken the discipline's interest in direct attention to the structures of consciousness as meaning that interpretation and inference cannot play a role in the phenomenological project. This can be seen in the work of Dan Zahavi (2008), a contemporary phenomenologist who looks back to Husserl's original project for his inspiration. Zahavi is very interesting for the present study of compassion, because of his strong interest in empathy. Zahavi argues that empathy is based on direct perception, not inference or interpretation, and he argues against "the argument from analogy" view of empathy, basing his own objections on those of Scheler.

When examining Zahavi's exposition of empathy in the sixth chapter of his book *Subjectivity and Selfhood* (Zahavi, 2008), it is illuminating to note not just the content of his arguments, but also the manner in which they proceed in his writing. Before actually putting forth any philosophical arguments of his own, he opens the chapter by mentioning

Habermas's criticisms of phenomenology and its failure to account for intersubjectivity. He then claims that a good part of this criticism is off the mark. Why? Firstly, he argues, it is off the mark because it is based on a linguistic turn in philosophy that has been replaced by a return to consciousness (Zahavi, 2008:148). This by itself, of course, is hardly an argument, since merely saying that something is no longer trendy cannot be seen as equivalent to proving it incorrect.

Zahavi proceeds with a lengthy exegesis of Scheler and his objections to "the argument from analogy," namely the idea that other people's minds are not directly accessible to us, and therefore we must rely on inference to ascertain what their mental states are from their behavior. The objections raised by Scheler, and summarized by Zahavi, are as follows. First, "To assume that our belief in the existence of other minds is inferential in nature is to opt for a far too intellectualistic account. After all, both animals and infants seem to share this belief, but in their case, it can hardly be the result of a process of conscious inference" (Zahavi, 2008:149) To claim that a theory is "far too intellectualistic" is not in itself a criticism with any content, and the second part of the claim is outdated given the sizable literature that has emerged on children's theory of mind (and failures thereof) that has emerged since Scheler. This research (see Flavell, 2004, for a review) shows that the case is not as simple as Zahavi presents, since theory of mind emerges developmentally. This literature is actually connected with and emerged alongside the idea of inference in animals (Flavell, 2004). Scheler's objections here appear out of date.

The second objection is that "For the argument to work, there has to be a similarity between the way in which my own body is given to me, and the way in which

the body of the other is given to me." Here, Scheler is making a good point, and one that might have been convincing in 1912, when he published this work. But the obvious *dissimilarities* between the way I experience my own body and the way I experience the bodies of others are not enough to prevent a recognition of the obvious *similarities*. The idea of mirror neurons suggests that there is enough of a similarity or parallelism between an individual's self-movements and the movements of others for this to be instantiated on the level of unconscious processing (Cook et al., 2014). Gallese and Goldman (1998) argue that the activity of mirror neurons accords well with simulation theory, thereby opposing Zahavi. Furthermore, the work of Singer (Singer et al., 2006) and others in the field of social neuroscience suggests a much closer overlap between others' experiences and my own by showing a large degree of overlapping neural activation between empathy for pain and pain experienced by oneself. These recent research results are intriguing from a *Lojong* perspective, because one of the interesting claims made by Santideva is that the apparent disconnect between my own experience and that of others arises primarily due to longtime familiarization and habituation, rather than any foundational or essential difference between self and others:

Through constant familiarity I have come to regard the drops Of sperm and blood of others as I. So in the same way, why should I be unable To regard the bodies of others as I? Hence it is not difficult to see That my body is also that of others.²¹

The third objection asks how we could empathize with creatures whose bodies "in no way resemble our own, for example, a suffering bird or fish" (Zahavi, 2008:149). A simple reply would be that the bodies of birds and fish *do* resemble our own in a number of ways, and the further away the body of an animal is from our own in terms of its expressiveness (say, for example, a snake, which is much more limited in terms of its facial expressions or bodily movements, not having limbs) the less deep our ability to empathize with it is likely to be. Incidentally, the idea that Scheler could so casually say that two things "in no way resemble" one another seems symptomatic of the essentializing and static tendencies of this kind of phenomenology. There is scant acknowledgment of the ways in which we as individuals construct similarity and difference, and have flexibility in changing the ways we construct such categories. Such flexibility, however, is of vital importance to contemplative practice and should be recognized by any phenomenology that would shed light on such practice.

The last objection is that "Even if these problems could be overcome, the argument from analogy would still be formally invalid" (Zahavi, 2008:149). This is because, "all that I am entitled to infer is that the foreign body is probably also linked with *my own* mind" (Zahavi, 2008:150). Like the other objections, this objection seems to arise from a view that inference would have to follow along the lines of a conscious, rational, well thought-through process. If that were the case, then Scheler's rejection of such a view would make perfect sense. But it is perfectly possible for inference to be taking place unconsciously and automatically. The psychologist Ap Dijksterhuis, for

²¹ Quoted in Lopez and Rockefeller (1987:80) who also provide an analysis of these verses.

example, has devoted much of his career to researching unconscious processing, and argues that unconscious processing can include not only inference, but also decision making, impression formation, attitude formation and change, problem solving and creativity (Dijksterhuis & Nordgren, 2006). Split-brain research also suggests that inferences can be made in ways that are not necessarily consciously accessible, or at least reportable (Gazzaniga, 2005). These are all possibilities that are much easier for us to recognize given the advances in cognitive science since Scheler's time. Given this, however, it seems remarkable that Zahavi chooses to open his section on empathy with such a lengthy summary of Scheler.

Zahavi then goes on to list two further objections of Scheler. These are, however, merely out of hand rejections of two "crucial presuppositions" made in the argument from analogy. The first is that the starting point is my own consciousness, since this is "what is given in a direct and unmediated fashion," whereas others' consciousnesses are not. The second (which seems to be the same as, or at least strongly implied in, the first) is that "we never have direct access to another person's mind" (Zahavi, 2008:150). To explain why these premises are wrong, Zahavi quotes Scheler as saying that such an approach "underestimates the difficulties involved in self-experience and overestimates the difficulties involved in the experience of others... We should not ignore what can be directly perceived about others, nor should we fail to acknowledge the embodied and embedded character of self-experience" (Zahavi, 2008:150). These are merely injunctions and not philosophical arguments; to say that we should not ignore what can be directly perceived is merely to beg the question. Moreover, these injunctions do not go any distance towards disproving a theory involving inference.

As Zahavi goes on, what becomes clear is that Scheler felt a strong aversion to the idea that our recognition of others' emotions had to involve a laborious, rational, "intellectual," and conscious process, and that Zahavi shares that aversion. Zahavi notes that for Scheler, "there is something highly problematic about claiming that intersubjective understanding is a two-stage process of which the first stage is the perception of meaningless behavior and the second an intellectually based attribution of psychological meaning" (Zahavi, 2008: 150). I agree with the basic impulse here of the objection. As we will see shortly, there are strong reasons to believe that intersubjective understanding is a two-more direct and fundamental way. Where I disagree, however, is the idea that the only alternative is an "intellectually based attribution," given the strong evidence for both unconscious inferential processing and simulation, which will be explored further in the following chapter when we examine theories of grounded cognition.

It is possible that the disagreement here is partially a matter of emphasis. Zahavi admits that, between mental states and bodily behavior, "One can occur without the other, which is why playacting or stoic suppression is possible, but this is not the norm" (Zahavi, 2008:152). I would argue that the opposite is true. It is not only in cases of playacting or "stoic suppression" when we are unable to collapse mental states and bodily behavior. Imagine the simple case of a man sitting and observing his wife for an hour while she is engaged in the task of reading an exciting novel. How long would he be able to maintain his attention on her (indeed, her mind)? While she is reading, a whole host of thoughts and emotions will be playing through her head as she vicariously experiences the situations described in the novel. But unless she bursts out laughing or begins to cryoccasional, but hardly typical, occurrences when one is reading a novel—hardly any of this would be clearly perceptible to the man. Moreover, if given this task, it would not be long at all before he became completely lost in his own thoughts. Why? Because they are immediately present to him, and he can become engrossed in them, whereas it is impossible for him to become engrossed in her thoughts—and that is simply because they are inaccessible to him.

This example shows that inaccessibility is the norm, not the other way around, as Zahavi claims, and it is precisely because it is the norm that we need language so vitally. It is because of our uncertainty of others' mental states and their often complete opacity to us that we require speech and expression from them. That expression could be bodily ("show me what you feel!") but it is expressive, semiotic in nature, and therefore interpretable. Furthermore, despite the occasions when bodily expressions and emotions do go perfectly hand-in-hand, the "norm" is much more for us to be in a state of a degree of uncertainty as to what the other person is really feeling or thinking. That very uncertainty, I would argue, born from an inability to directly perceive others' mental states, is the ground for what Rochat calls our "basic affiliative need" and the concomitant "fear of social rejection and isolation" (Rochat, 2009a), which we will turn to later in this chapter.

It should be noted that this does not contradict the approach of what we are calling *Lojong* contemplative phenomenology. In the quote from Śāntideva above, habituation over multiple lifetimes is given as the reason why my own body seem so naturally "mine." Śāntideva suggests that since this is a product of habituation, it can be undone through habituation. Research on CBCT suggests that performance on an

empathic accuracy task and brain regions associated with the putative mirror neuron network, and therefore with empathy, can be strengthened through contemplative practice (Mascaro et al., 2013). In other words, whether we agree or not regarding how "normal" veridical perception of thoughts and emotions are, it would appear that this is a skill that can be strengthened through practice.

Zahavi strongly opposes phenomenology with interpretation, and this is probably why he relies so heavily on Husserl and Scheler, and less so on the later phenomenologists. He therefore makes generalizing statements such as "The phenomenologists would concur with this approach" (Zahavi, 2008:151), completely omitting the fact that Heidegger (after Husserl probably the philosopher most closely associated with phenomenology) rejects some of the fundamental assumptions of Husserlian phenomenology to develop a hermeneutical phenomenology much more amenable to the role of language and interpretation in intersubjective experience, and therefore completely different from the stance presented by Scheler (Carmen, 1999; Lopez & Willis, 2004). In making such claims, Zahavi is attempting to bring the weight and legitimacy of the tradition to bear on his arguments; however, "the tradition" he is calling upon is not as coherent as he presents it. His idea that emotions are not inferred or interpreted seems to be drawing heavily from Husserl's idea of a direct *intuition* (Anschauung). As Moran notes, for Husserl, intuitions may be hard-won insights akin to mathematical discoveries, or they may be more mundane experiences accompanied by a strong degree of certainty: "When I see a blackbird in the tree outside my window under normal conditions, I also have an intuition which is fulfilled by the certainty of the bodily presence of the blackbird presenting itself to me" (Moran, 2000:10). Furthermore, as

Moran notes, this idea is connected with Husserl's idea of "essential natures" (Moran, 2000:10).

For Zahavi, too, the idea that upon seeing another person scowl I see their anger as a kind of direct perception-without inference and without interpretation-is in a hidden way connected with an idea of essences. One way of seeing this is by considering the debates we examined earlier in psychology regarding whether there are basic emotions. Paul Ekman (1992, 2008) has long argued that there are basic emotions and they are distinguishable according to certain features. Most importantly, they are accompanied by a signal, and this would be the bodily expressions Zahavi sees as so intimately connected with emotions. We will see in the next chapter that a number of researchers in psychology, anthropology and neuroscience have argued that the line between cognition and emotion cannot be so easily drawn. If this is the case, then not only are there no "basic emotions," but even "emotion" as itself may not be as useful an analytical category as once thought, regardless of its use in common everyday parlance, because it does not pick out any particular single process or set of features. This creates a serious problem for Zahavi, because his position that empathy is direct perception would then entail that one should be able to directly perceive not only certain psychophysical processes like anger, but any mental state, including thought. As argued in the example of a man watching his wife read a novel, this seems implausible.

Such an extreme position is not, in my view, necessary for a contemplative phenomenology. The phenomenological approach can retain validity and will remain much more beneficial if it can accommodate the interpretive and inferential processes that are so crucial in our experiential life. In fact, interpretation plays a fundamental role

in enabling the transformative power of practice to reshape our experience. When considering the Buddhist tradition, it is instructive that despite the variety of understandings of the philosophical notion of "emptiness," each tradition of understanding recognizes that emptiness on some level has to do with a disparity between reality and appearance (Hopkins, 1983). In arguing for empathy as direct perception, Zahavi is pushing for a closer alliance between reality and appearance. In arguing for a hermeneutical phenomenology, Heidegger (2008) is both opening up the space for a disjunction between appearance and reality as well as opening up space for a transformation of subjectivity, since interpretations are fluid and can always be changed.

For Husserl and Zahavi, *contra* Heidegger, the aim is to see what is there—to arrive at an intuition (*Anschauung*) that is permeated by certainty. We should remember that for Husserl, phenomenology was both a critique of science and a way of making philosophy "scientific." For hermeneutical phenomenologists, the goals of Husserl and Zahavi seem slightly naive, and the certainty with which we adhere to certain experiences is merely a sign of the automaticity and "seeming-naturalness" of certain interpretations, which are interpretations nevertheless. Husserl and Zahavi may respond by saying that to resort to interpretation requires the acceptance of a mind-independent reality that one is interpreting, yet never has access to. They may feel that to succumb to such a view is to imprison oneself in a solipsistic universe, and thus their alternative is to push towards a collapse (never a full collapse, of course) of reality and appearance.

In contemplative phenomenology, however, there is less danger of this, since the very orientation is in the direction of increasing empathy towards others. For the process to allow for transformation and inner development, however, there has to be a spectrum.

This appears implicit in contemporary *Lojong*-based practices. In the CBCT manual, for example, we find the lines:

Relating to a given situation from one perspective—say, a distorted perspective—will give a certain response; seeing the same situation from a different perspective—one that is more in tune with the facts of the situation—elicits a completely different response (Negi, n.d.).

The purpose here is to change perspectives such that the new perspective effects a different, and more healthy, emotional reaction. Earlier we noted another *Lojong* practice, that of visualizing others as one's mothers, *mar shes*, which can even involve trying to superimpose the features of one's mother onto the other person. Such practices are made possible by this fluidity between reality and appearance. On Zahavi's model of empathy, it is harder to see how such practices could be effective.

The Feeling of Being "Real"

Generally we say that something is "real" or "not real," or that it "exists" or "does not exist." But this type of language is already an abstraction from a phenomenological perspective. Phenomenologically, things appear and disappear from view (view here being used as a metaphor for all of experience and consciousness, not merely vision). Moreover, they appear and disappear with different degrees of vividness, and I would argue that it is this vividness that, phenomenologically, corresponds most closely to the idea of "reality" for us in our experience. Therefore, in opposition to metaphysical or ontological approaches to reality, which tend to offer only a dualistic option (something is real or is not real, exists or does not exist), phenomenological reality exists along a spectrum. For example, if I experience a very intense stomach ache, the pain appears as extremely real. Moreover, it appears not as merely an object of consciousness or perception, but as a modality of perception. It is this spectrum, in part, that allows for contemplative phenomenology and its teleological approach.

The phenomenology presented in *Lojong* is interested in effecting changes in consciousness, not in external reality. It is through the altering of structures of consciousness—what I call the transformation of subjectivity—that phenomenal reality changes for the *Lojong* practitioner. Tsongkhapa (2004:52) gives the example of a friend who was once an enemy: "At first, when you heard even the name of your enemy, fear arose. Later you were reconciled and became such close friends that when this new friend was absent you were very unhappy." Importantly, Tsongkhapa notes that it is not the friend who has changed, but the practitioner. In *Great Exposition* he writes, "This reversal resulted from familiarizing your mind with a new attitude. So likewise, if you become habituated to viewing yourself as you presently view others [with an attitude of neglect] and to viewing others as you presently view yourself [with a cherishing attitude], you will exchange self and other" (Tsongkhapa 2004:52). This sentiment echoes the earlier verse by Śāntideva, which was also on the topic of equalizing and exchanging self and other.

It is important to differentiate changes in the structures of consciousness, that is, subjectivity, from changes in the contents of consciousness, that is, subjective experiences. To be in intense pain is not merely to experience intense pain, but primarily to *be someone* who experiences everything as one in intense pain (Scarry, 1985). The world such a person inhabits becomes the world of one in pain. In Bowlby's (1983)

theory of attachment, a person who is securely attached is not experiencing that secure attachment as a content of consciousness; rather, secure attachment structures their experience of the world—their subjectivity—in such a way that they are more likely to take risks and less likely to experience environmental stress in a new situation. In a similar way, I would argue that the compassionate person who is the *telos* of *Lojong* practice is not merely a person who experiences compassion for other sentient beings as a content of experience (although she is that, too, of course), but principally a person who experiences the world as someone who is compassionate.

The clearest example of this is in the descriptions of how other beings become objects of *yid 'ong gi byams pa*. We examined this term and its role in the cultivation of great compassion in the preceding chapter. Sometimes translated as "affectionate love" or "love that finds beings attractive," *yid 'ong gi byams pa* refers to a love that takes great delight in its object. As we saw, it is to be distinguished from the love that is the correlate of compassion, namely the love that wishes for beings to have happiness (Pabongka, 2006:529). Persons who are able to move from bias towards having *yid 'ong gi byams pa* towards all people are not merely experiencing a new content of consciousness; it seems more apt to say that they have become a new kind of person, and indeed inhabit a new kind of world, where everyone appears as delightful as their own precious child.

Phenomenologically, the reality of experiences and objects of experience are always shifting along this spectrum of reality, and because the subject is co-constituted with the world, the reality of the subject is also shifting. Implicit in the quotes from Śāntideva and Tsongkhapa above is the argument that for contemplative practitioners even the "mineness" or "first-person givenness" or "dative" of experience—the fact that

every moment of consciousness is presented *to me*—is also related to the question of phenomenological reality, and is not constant, but shifts across experiences, some of which seem more "mine" than others. This is supported by the research of Singer et al. (2006) on the fluidity and variability of empathy for pain responses. The experiences of schizophrenics that Zahavi refers to in his work (Zahavi, 2008:143) is therefore merely one example of moments in which the reality of "mineness" decreases phenomenologically; however, there must still be some degree of mineness there, according to Zahavi, since they can recall these experiences and even recall how they were feeling when these experiences were occurring.

On Sharing and Not Sharing a World

Compassion requires the reality of the pain of others, and therefore the reality of others (other beings), but it also requires seeing others with a love that delights in them, creating a strong sense of social connection and bonding. The "mother of all fears," according to developmental psychologist Philippe Rochat (2009a), is social rejection, and related to this is social isolation. The former is being actively rejected by others, as in being ostracized; the latter is merely to be "invisible" or "transparent" to others. However, a phenomenological account of compassion reveals that it is not only we who may be invisible and transparent to others. It is also others who may be invisible or transparent to us.

In a recent article, Rochat outlines the features of what he calls "the basic drive to be acknowledged in one's own existence through the eyes of others," or, more simply, the "basic affiliative need" (Rochat 2009b: 314). This is a need for mutual recognition

and acknowledgment, and it is basic because, in his words, "we essentially live through the eyes of others. To be human... is primarily to care about how much empathy, hence acknowledgment and recognition of our own person, we generate in others — the fact that we care about our reputation as no other animal species does" (Rochat 2009b: 306). Living through the eyes of others clearly implies a strong and intimate connection between self and other; thus it is no surprise that Rochat considers that "social cognition is inseparable from self-cognition. Social knowledge and self-knowledge are two sides of the same coin" (Rochat 2009b: 308). For Rochat, the most important topic to be studied in the field of social psychology is this need for mutual recognition, which he sees as absolutely fundamental to all social interaction and as emerging very early developmentally. He writes, "Sociality or the quality of being sociable is inseparable from the elusive feeling of being included and having a causal role or impact on the life of others. It is about being 'connected,' ultimately about being visible rather than invisible, recognized rather than ignored or ostracized... In this view, sociality rests on mutual recognition" (Rochat 2009b: 308). Rochat goes so far as to say that "The need to be recognized ultimately drives social cognition" (Rochat 2009b: 306).

Similarly, medical anthropologist Arthur Kleinman's recent work addresses concerns about the medicalization of human suffering, and his strong concern for social suffering leads him to address questions of morality and subjectivity, which for him, in line with Rochat's work, are inherently intersubjective. For Kleinman, experience itself is both inherently interpersonal and moral. It is interpersonal because, he writes,

It is a medium in which collective and subjective processes interfuse. We are born into the flow of palpable experience. Within its symbolic

meanings and social interactions our senses form into a patterned sensibility, our movements meet resistance and find directions, and our subjectivity emerges, takes shape, and reflexively shapes our local world (Kleinman, 1999: 358–359).

It is furthermore moral, he writes:

because it is the medium of engagement in everyday life in which things are at stake and in which ordinary people are deeply engaged stakeholders who have important things to lose, to gain, and to preserve (Kleinman, 1999: 362).

Kleinman further discusses what he calls "transformations of subjectivity," whereby construals of suffering changed across historical and cultural settings in ways that changed the experience of suffering for those societies. He notes the rise of suffering as having a salvific function in second century Christianity, writing:

This was no more and no less than a transformation in subjectivity. The new subjective self took institutional form around the organized collection of funds, administration of hospitals and poorhouses, and experiences of religious transformation. The entire cluster of representation, self, and institutions became a vehicle of political power (Kleinman, 1999:382).

He then contrasts this with the contemporary practice of medicine, where pain is seen as having no value or purpose whatsoever. Of this age, he writes:

No one is expected anymore to merely endure pain and suffering. The methods for socializing children and the societal institutions that support moral meanings and practices do not reward endurance of misery or acceptance of the limits of repair and rescue. The salvific potential of suffering is at an all-time low (Kleinman, 1999:383).

Kleinman's focus on these transformations of subjectivity is very helpful, in that it illustrates the plasticity of subjectivity, again reinforcing the need for a phenomenological model that allows for this plasticity.

For Rochat as well, knowledge about the self comes largely from interaction with others, and the self is constituted through relations with others. For Rochat, the idea of a core, independent self, is simply false. Rochat's insists that "within months of birth, the self is increasingly defined in relation to others, not on the basis of an interior subjective experience" (Rochat, 2009a:8). This is similar to Mead, who observed that "the individual mind can exist only in relation to other minds with shared meanings" (Mead 1982: 5). This is a dynamic process of mutual interaction that is deeper than mere surface level imitation or mirroring; it is participation in the collective dance or ritual that forms the foundation of sociality and society itself.

The mere fact that scholars from Heidegger and Mead to contemporary scholars such as Rochat have gone to such great lengths to show the importance of sociality in the development of the self itself indicates that this line of thinking is something that is not taken for granted in western thought. The background assumption against which such scholars are articulating their viewpoints is the idea that the individual is a person who does not depend on others; that the self is that which exists separately from others. It has been noted, however, that this idea of an individual self who exists apart from others, and of a society that is the coming together of such originally-free individuals through a form of social contract, for example, is a particular, culturally- and historically-specific development, given voice in the writings of Rousseau and Locke (Taylor, 1989).

Despite our strong need to be accepted by others, however, we often do not know whether we are in fact accepted. This state of not knowing is what causes a kind of existential anxiety, a fear that we are not loved, not cared for, not accepted, not even felt or seen. Thus, awareness of the relational nature of self and the importance of "sharing a world" does not necessarily lead to only positive effects. As mentioned above, Rochat notes that the basic affiliative need and other-dependence of self-consciousness results in a fear of social rejection and social isolation that he labels "the mother of all fears" (Rochat, 2009a). This is the fear and felt intolerability of being "left behind" or "left out," of being "transparent" or "invisible" to others. The need to share a world has therefore both positive and negative dimensions. On the one hand, it can fulfill the basic affiliative need and provide a source of comfort and support. On the other hand, it can represent a social pressure to "go along with others" and to conform to group norms and behaviors. That social pressure can become overpowering and even lead to the wish to "vanish" from the overburdening gaze of others.

Thus, while Zahavi provides a basis for intersubjectivity, it is less clear how he provides a basis for this kind of fear, which seems to indicate a certain failure of empathy. We often have the experience of *not* sharing a world. Having a disagreement with someone, even civilly, is but one example. It is similar to when one is with another person and says, "Here, look at this stain on my shirt," and the other person says, "What stain? I can't see it," and you say, "Here, look, right here, it's very faint, but you can see the color is different." Until that person can see the stain for himself, it does not exist for

him. It may exist for him as something that exists for you (he may say, "I know there is a stain there, because my friend told me, and I believe him, even though I can't see it myself."), but it does not exist directly for him, in a phenomenological sense. Therefore, it exists provisionally or theoretically for him, it exists in the abstract, but not as a direct perception or intuition. Its existence has less reality and virtually no vividness.

The importance of the cultivation of *yid 'ong gi byams pa* in *Lojong* practice and in the extended meditation on the sufferings of others, to the point of seeing that suffering in vivid detail until the practitioner has a visceral reaction herself, suggests that *Lojong* is interested in a phenomenological shift whereby the experiences of others become more vivid to the practitioner. Indeed, this shift in vividness can be understood as one of the points of the "exchange of self and other." One's own experiences tend naturally to be more vivid to oneself than the experiences of those to whom one feels little affection. By ramping up affection for others, indeed to the point of cultivating *yid 'ong gi byams pa* or a love that delights in them, and by exchanging the object of cherishing from oneself to others, the practitioner is effectively making the experiences of others more phenomenologically vivid and real to herself.

We could say that the degree to which we share a world is therefore related to the degree of reality we accord the experiences of others. When the experiences of others are more "real" for us, their world becomes our world, and we "share" a world. But when the experiences of others lack that degree of reality, and exist only on what I am calling a theoretical or abstract level, they are part of another world that is not directly my world. Another person is crying and in deep pain, but that is her world; in my world, things are fine, and I am happy. What the research of social neuroscientists such as Singer et al.

(2006) suggests, however, is that when someone I deeply care about cries and is in pain, then this has a certain reality for me that I cannot escape—it is part of my world, and I feel pain as well. However, this empathy needs to be cultivated and expanded in ever-increasing and sophisticated ways. The expressiveness of the other opens itself up to me to be seen through the development of my own capacities to perceive and to *imagine*. This happens through a dynamic process involving my imagination and not merely through perceiving another's bodily expression that has a kind of one-to-one correspondence to a given emotion, such as anger.²²

Framed in this way, a certain progression becomes evident, and it would be part of the project of a neurophenomenology of compassion to investigate if this progression is tenable. Firstly, the cultivation of compassion is aimed at making the experiences of others (particularly their suffering and happiness) real for us. This in turn brings the worlds inhabited by ourselves and others closer together; when the experiences of others become real (as real, perhaps, as our own experiences of happiness and suffering) we naturally come to share a world with them, because we are no longer divided by the separation of my experience from yours. The fact that others have become less transparent and more real and visible to us is therefore parallel with a process of ourselves feeling more real and less transparent to others. This is none other than the meeting of our basic affiliative need, to use Rochat's term, and therefore it lessens our fear of social isolation and social rejection. The lessening of those fears is naturally

²² Furthermore, if this line of reasoning is valid, then we would expect to see that as empathy and social connection with others decreases, a person would feel increasingly isolated and would lose the vividness of connection with others, feeling invisible and relating to others as if they were invisible. This is supported by recent qualitative research on suicide in Japan (Ozawa-de Silva, 2010).

accompanied by a reduction in anxiety, fear, stress, loneliness, and depression. We would then enjoy the corresponding health and psychological benefits that come from this. This, it seems, may be the process through which compassion meditation leads to reduced reactivity to psychosocial stress (Pace et al., 2008). Research projects along these lines would constitute the beginnings of a neurophenomenology of compassion, but they would need to include the phenomenological reports of participants, something that is often excluded in current meditation studies.

Conclusion

As we saw in chapter two, most proponents of contemplative science see it as something more than merely the scientific study of contemplative practices. If contemplative science is to achieve its potential, it must approach the question of firstperson experience in a sophisticated way. Francisco Varela (Varela et al., 1991) clearly saw the potential in turning to the phenomenological tradition, and others have followed suit (Lutz & Thompson, 2003). Up until now, however, no one has closely examined the question of which strains of the western phenomenological tradition might best suit the purposes of contemplative science. Furthermore, no one has drawn out the implicit phenomenology present in the *Lojong* tradition.

In this chapter I engaged in both these tasks, drawing out what I consider to be a contemplative proto-phenomenology in specific *Lojong* texts and then placing that contemplative phenomenology within debates in western phenomenology, psychology, and anthropology. Specifically, I contrasted views that stress the plasticity and interpretability of human experience, including its developmental dimension, with those

that see human experience as less mediated by these factors. I argued that the *Lojong* tradition aligns far more closely with the former than the latter, and that the former therefore represents a more solid foundation for the development of a contemplative phenomenology that must be established if the field of contemplative science is to reach its full potential.

Interestingly, in a recent examination of seven studies, Schumann et al. (2014) found that beliefs about the malleability of empathy (that is, whether empathy can be cultivated or is fixed and static) predicted greater empathic effort in challenging circumstances, including more time spent listening to others' stories and greater willingness to help others. We also saw that in one CBCT study, Mascaro et al. (2012) found that the intervention group exhibited more empathic accuracy compared to controls and also increased activity in areas of the brain believed to be related to empathy, such as the inferior frontal gyrus (IFG) and dorsomedial prefrontal cortex (dmPFC). Results like these suggest that empathy may be a skill that can be cultivated, and furthermore, it is actually beneficial for us to believe that it is a skill that can be cultivated. I believe this research lends further support to the line of argumentation that I have presented in this chapter, namely that an interpretive phenomenological approach is not only better suited for contemplative science, but is also more logically coherent and more generally consistent with the latest research.

A phenomenological approach should include a fuller treatment of the body. It was also noted here briefly that one difference between the contemplative phenomenology found in *Lojong* and western phenomenology is the role of emotions, which play an important role in the former, but are seldom mentioned in the latter. Both of these topics will form the main subject matter of the following chapter, which will explore how the *Lojong* tradition relates to contemporary research on emotions and in the field of grounded and embodied cognition.

CHAPTER FIVE: LOJONG AND COGNITIVE SCIENCE

Thus far we examined the possible ways attention to contemplative practice can benefit positive psychology (chapter one); how we might situate the *Lojong* tradition within the broader project of contemplative science (chapter two); the specific approach to the cultivation of compassion presented in a selection of key *Lojong* texts, specifically those texts that serve as a basis for contemporary secular compassion-training protocols (chapter three); and the implications for *Lojong* practice in the establishment of a contemplative phenomenology (chapter four), itself a project that exists for the purposes of contemplative science.

In this chapter, I explore key developments in psychology and related fields that hold special relevance for contemplative science and contemporary *Lojong*-based practices. I begin with an examination of the cognitive science of religion. This is subfield that we might expect would have a decent amount to contribute to the project of contemplative science, since it employs psychological and scientific approaches to the study of religious belief, practice and ritual. Nevertheless, cognitive science of religion has in fact played almost no role in the development of contemplative science, and I endeavor to show why this is the case. I argue that cognitive science of religion should be broadened to include a wider perspective and a broader scope of inquiry. I therefore turn to specific areas of cognitive science that I feel have much more to offer in terms of developing contemplative science. Specifically, I focus on research in emotions and in grounded cognition, showing their relevance for understanding the *Lojong* tradition in particular, and by extension, for understanding and developing contemplative science.

Cognitive Science of Religion

In proposing an alliance between positive psychology and contemplative science, it would be natural to turn to the small subfield of the cognitive science of religion, since this field represents an attempt to bring philosophy, evolutionary theory, psychology and neuroscience to bear on the study of religions, religious beliefs, and religious practices. Indeed, several recent theories of religion have taken a cognitive turn (Barrett, 2004; Boyer 1996, 2001; Guthrie 1996; Lawson & McCauley, 2002; McCauley, 2011; Slingerland, 2008) and work in the cognitive science of religion has prompted considerable interest within the field of religious studies. Boyer's work, *Religion Explained* (Boyer, 2001), in particular, has drawn a fair amount of attention and criticism (Cho and Squier, 2008a; Cho and Squier 2008b; Visala, 2011). Such work is largely ignored in contemplative science, however, and has not made a major impact in religious studies, despite occasional notice in the *Journal of the American Academy of Religion.*²³ This is most likely because the cognitive science of religion has until now only narrowly

²³ A lack of influence is more difficult to identify that the presence of influence, but this claim is based on the paucity of references to the work of Boyer and other cognitive science of religions scholars in the fields of contemplative studies and the scientific study of contemplative practices. To my knowledge, a cognitive science of religion scholar has never been invited to participate in any of the Mind and Life dialogues that have been organized over the past twenty over years to bring contemplative scholars and scientists together to discuss what I am here calling "contemplative science." Furthermore, they have not been well represented at the major international conferences on contemplative science, such as the International Symposium for Contemplative Practices organized by the Mind and Life Institute. This is not to say that scholars who may identify as being in the field of the "cognitive sciences" (as opposed to "cognitive science of religion") are absent from such meetings. Notable cases include John Vervaeke and Evan Thompson.

explored the possibilities that could arise from a sustained dialogue between scholars in religious studies and those in the cognitive sciences.

In this dissertation, the interest in cognitive science and its application to the study of religious traditions and religious practices falls more within the domain of contemplative science, and does not intersect very much with what is generally known as "cognitive science of religion," which is dominated by questions regarding the origins and nature of religious beliefs (Barrett, 2004; Boyer, 1996, 2001). The interest here is neither to return to a perennialist position of a universal "essence" that is the same across religions, and of which each religion is a particular manifestation, nor is it to posit any kind of special aspect of, or kind of, cognition that results in or "explains" religious behavior and beliefs. It is also not to speak of "religious" or "mystical" experience as opposed to ordinary experience, something that has attracted attention for quite a while, from William James (1936) to, more recently, Ann Taves (2009).

Rather, the purpose here is to investigate the possibility that contemplative practices, which arise within specific cultural and religious contexts and belief systems, may call upon aspects of shared human embodiment in order to render those practices especially efficacious in the transformation of subjectivity. The focus here is therefore specifically on grounded cognition and psychological research on emotion, with each topic being treated in turn. This specific use of cognitive science, cognitive psychology, and neuroscience, is important because if cultural and religious practices do not have useful application beyond the members of their specific communities, even when "secularized," then contemplative science itself will remain a rather unimpressive sub-field with little to contribute to the science of human well-being and flourishing or

positive psychology. If, on the other hand, such practices do have useful application beyond religious communities, then the body and embodiment is a good place to look for those cross-cultural similarities. This is because it is easier to see cross-cultural similarities in the body than it is in areas of culture and religion, where "universalizing" tendencies are—at least nowadays—met with intense suspicion in the humanities and some social sciences (cf. Cho and Squier, 2008a; 2008b). Attention to the role of embodiment in contemplative practices is therefore a practical starting point, and may help us to understand better those aspects of religion that deal with existential and psychological experiences that cut across cultures and religious traditions. This still allows for the fact that they may be expressed in particular ways unique to a given culture or religion. Despite hesitation among certain religious studies scholars towards cognitive science, such an approach may increase interest in, and attention to, religion, religious practices, and religious rituals, since it provides new methodologies to shed light on the very significant effects that such practices have on the mind and body.

In sharp contrast to the cognitive science of religion, which is often attacked as being reductionist (Cho and Squier, 2008a; 2008b), much of the scholarship on religious and contemplative practices within religious studies and anthropology situates the practices so firmly within historical and cultural contexts, that they appear religiously or culturally specific.²⁴ This may be due in part to a view that religious and healing practices are effective for those who participate in a given symbolic world (members of a certain culture or "believers"), but are not effective for those who do not ("non-believers"). This view was clearly articulated by Levi-Strauss (1963) in his work on magic and shamanic

²⁴ Many examples could be given that typify this approach. For one example, see Kapstein (2000).

healing and has been taken up by many others, such as Obeyesekere (1985) who called the therapeutic effectiveness of cultural practices "the work of culture." Interestingly, this view emphasizes the importance of attention to culture and religion because the latter have real, even physical, effects. The anthropologist Daniel Moerman's work on symbolic healing and placebo effects, for example, is a product of this tradition of thought (Moerman, 2002; Moerman and Jonas, 2002). This view therefore involves a recognition of a mind-body connection, but it links the effects of such practices to beliefs and participation in a specific society or community. While important, such an approach can actually limit investigation into whether or how such practices might have effects that extend across traditions, cultures, and communities. This may be due to the diversity of practices and beliefs across religions and cultures, the lack of a sophisticated mapping of the actual cognitive and affective states and processes involved and how they relate to physiological states and processes, and furthermore a perceived danger of overgeneralization across cultures and religions—something particularly anathema in the humanities and cultural anthropology.

Recent work in grounded cognition may offer a way forward in this respect. Much of this work supports the idea that, just as we share commonalities across cultures in terms of our physical embodiment, which structures our experience of the world, so do we share commonalities in terms of cognitive and affective processes, because these are fundamentally processes grounded in the body and in sensory perception (Barsalou, 2010). Such theories may therefore provide powerful means for empirically studying the effects of various practices on the body and mind, thereby providing tools for studying the commonalities of such practices across religious and cultural difference. Acknowledging such commonalities does not efface the important roles that religion and culture play in shaping and constituting our experience of the world; rather, it supports the importance of these roles.

Grounded Theories of Cognition

Grounded theories of cognition provide sophisticated models for understanding the relationship between perception, conceptual processing, and action—all of which can take place on an unconscious level. Barsalou's model (Barsalou 1999; Barsalou et al., 2003, 2005; Niedenthal et al., 2005) is one of the most interesting and powerful of these, and, together with the cognitive metaphor theory proposed by Lakoff and Johnson (1980), it holds great promise for the study of contemplative practices. This section will explain Barsalou's approach and then draw out its significance for the emerging field of contemplative science, using specific examples from the *Lojong* tradition.

The term "grounded cognition" refers to a position within the cognitive sciences that contends that there is a close connection, rather than a hard and fast separation, between so-called "low-level" modality-specific perception and cognition and "higher-level" cognition (Barsalou, 2008, 2010). As a term, "grounded cognition" encompasses three broad areas of emerging research: embodied cognition, simulation, and situated cognition, each of which will be explained in detail below (Barsalou, 2008). Although grounded cognition began as a less popular alternative to non-grounded approaches, acceptance of grounded cognition has been growing, in part due to increasing empirical evidence supporting grounded views (Barsalou, 2008, 2010; Niedenthal et al., 2005). Few attempts have been made, however, to examine the implications of grounded cognition

for the study of religious practices, and the majority (but certainly not all) of the work in the field of the "cognitive science of religion" has largely ignored grounded cognition (for exceptions, see Slingerland 2008).

There is great potential, however, in bringing together work in grounded cognition and work in religious and contemplative practices. Grounded cognition provides both new methods for studying, and new ways of interpreting, religious practices and their effects. Similarly, religious and contemplative traditions offer researchers of grounded cognition both concrete opportunities to study practices that could shed light on cognitive processes, particularly those that involve effecting changes cognitive and affective processing, and also indigenous theoretical models for understanding such processes that can be brought into dialogue with the theoretical models being developed in the cognitive sciences. Lastly, interest in the body and embodiment has increased dramatically in recent years in the humanities, including the field of religious studies, but such interest has largely taken the form of traditional religious studies approaches (historical, ethnographic, philological, sociological) (Coakley, 2000). While such approaches are valuable for the study of the body and embodiment, the approaches taken in work in grounded cognition, particularly in the area of embodied cognition, provide a variety of new ways to study the relationship between the body and cognition that can play a very important supplementary role to humanities and social science methods. This seems especially relevant to contemplative science.

Grounded cognition approaches can best be understood by contrasting them with non-grounded theories, the dominant form of which relies upon a theory of amodal symbols that are transduced from perception modalities. Amodal theories of cognition maintain that knowledge consists of amodal symbols (Barsalou, 2008, 2010). The term "amodal" here refers to the fact that once such symbols are "transduced" from the body's sensory modalities (such as vision), they are no longer tied to those modalities. These symbols can then be retrieved and expressed using words.

For example, according to the amodal view, when a person experiences a situation, which involves all of the body's sensory modalities, this produces representations in the brain's modality-specific systems that are then "transduced" into amodal symbols that are then stored in memory and that constitute knowledge. Some, such as Jerry Fodor (1983) and Steven Pinker (1984) have called this language-like symbol system "the language of thought" or "mentalese"—the idea being that despite there being different languages, there is an underlying mental system of symbolic representation that is linguistic in nature and that is basically universal. Operations can be performed on these symbols, and knowledge can be retrieved through them, but this no longer involves the body's sensory modalities and, correspondingly, would appear to not require further activation of the brain's motor system, visual system, and so on, since these are principally for perception and action only, and not for merely processing or retrieving knowledge. In an important difference to embodied theories of cognition, thinking about or engaging the amodal symbols that represent knowledge does not reactivate the perceptual and motor systems that were involved in the original experience (Barsalou et al. 2003, 2005).

Grounded theories differ from this by claiming that knowledge is not represented by amodal symbols but by simulations that rely upon (are "grounded in") the modalityspecific systems of the brain. The experience mentioned above is not transduced into amodal symbols, but rather partially captured on-line by association areas in the brain. This capture includes all of the modality-specific information as well as information about affect and bodily states. Later recall of the knowledge, or processing involving it, then re-activates the modal systems in the brain that were initially involved. Therefore, conceptual knowledge on a grounded view does not consist in amodal symbols but rather in "simulators," that is, partial (and typically unconscious) simulations of the original experience.

As an example, based on numerous experiences of interacting with dogs, a wealth of modality-specific information is collected, such as the smell of a dog, the tactile feel of the dog's fur, how one feels when one is with dogs (scared, excited, happy, or relaxed), one's bodily state when interacting with dogs (actively running about on a field, or passively sitting at home by the fireplace) and so on. Later, when one mentally processes the concept "dog" (such as by reading about a dog, talking about dogs, thinking about dogs, etc.) all this information across the brain's modalities partially comes on-line as a "simulation," as if one were in those situations in which one typically interacted with dogs. This would then explain changes in one's affective state when processing the concept "dog" (feeling happy when thinking about the dog, versus feeling scared), one's bodily state (feeling more active and upright, if one typically engaged with dogs in active settings, versus feeling relaxed and grounded, if one typically engaged with dogs in passive or relaxed settings), and so on.

Research that focuses on this two way-street of how cognition affects body states and how body states affect cognition, forms the subfield of "embodied cognition." Similarly, research on the situated nature of the simulation (how conceptually processing "dog" brings on-line various situated information about the park or the fireplace, and so
on) is referred to as "situated cognition" (Barsalou, 2008, 2010). Barsalou et al. (2003) reviewed literature on social embodiment effects that covers both embodied cognition and situated cognition within the framework of simulation, showing the close interrelationships between these subfields of study, and proposed a theory for "pattern completion" that accounts for the results of some of these studies. According to this theory, because activating a concept (thinking of "dog") actually activates a simulation (the concept is, in this model, a simulation) rather than merely an amodal symbol or set of amodal symbols, and because these simulations are situated, such activation brings more information online than what we would typically consider to be "dog" (the park or fireplace, the smells, the touch, one's own affect, etc.). Conceptual processing is then influenced in the direction of pattern completion, in other words, towards situations that are congruent with the situated simulation that has been brought online. Processing that would be incongruent with the situated simulation is inhibited. Empirically, the support for this is in faster versus slower response rates (see Barsalou et al. 2003, 2005).

From an evolutionary perspective, it is possible that certain forms of cognition developed in parallel with motor function, and this may account for the close connection between the two seen in grounded theories. This close relationship seems to be supported by studies showing how cognition (in the case of priming, for example) can facilitate or inhibit motor function, and how motor function and facilitate or inhibit certain cognitive tasks. Lakoff and Johnson (1980) take this further in their conceptual metaphor theory, where they see thinking and language as fundamentally grounded in motor action and the fully situated nature of cognition as embodied beings. Grounded theories therefore have an easier time in accounting for the increasing empirical evidence showing connections between conceptual processing and motor activation. As just one example, Hauk, Johnsrude, and Pulvermüller (2004) showed that subjects who listened to words referring to face, arm, or leg movements had motor system activation in the areas associated with face, arm, and leg movements, respectively.

Grounded Cognition and Contemplative Science

Grounded cognition likely has a great deal to offer not only the study of contemplative practices, but also the study of religion in general, and perhaps even more broadly, the humanities. This point has been brought by a few scholars (Barsalou et al., 2005; Ozawa-de Silva, 2014a; Slingerland, 2008), but could benefit from much more attention. Here I will restrict myself to the much narrower question of what significance grounded cognition might have for (a) the study of contemplative practices and (b) the *Lojong* tradition in particular. I will begin with the second of these, making a few points regarding the similarities between grounded cognition views and theories of cognition in Buddhism, and then move to the more general point of grounded cognition and the study of contemplative practices.

An important point in bringing science and contemplative scholarship together relates to how models and concepts from two starkly different traditions can be brought into mutually beneficial dialogue. One of the clear differences between what we may term "Buddhist psychology" (meaning the Buddhist models of mind and cognition) and western psychology is that while the former posits six senses, including the mental sense (Dreyfus and Thompson, 2006; Vasubandhu, 1991), western psychology posits only the five physical senses. Traditional amodal views maintain this distinction by seeing a firm separation between perception and cognition that is directly dependent on the body's sensory modalities (the traditional five senses) and processes of higher cognition, which, although proponents of amodal theories would most likely reject this point, appear to take place in a less embodied "mind," at least in comparison to grounded views. This maintains a stronger degree of mind/body separation than grounded views; in fact, it can be seen as not merely a mind/body separation, but also a legacy of a Cartesian one, since it remains to be demonstrated how the manner in which amodal symbol processing is realized can be grounded in the physical processes of the brain. It must be said, of course, that the majority of researchers and theorists advocating an amodal view would not want to posit a disembodied mind, but would assume that such processes are in fact realized in the brain in ways yet to be discovered and demonstrated empirically.

Grounded cognition, on the other hand, not only wears away at the hard-and-fast divide between body and mind, but also in doing so begins to approach the Buddhist psychological model of six senses. This is because grounded approaches acknowledge internal perception as also being a form of perception. For example, in addressing the challenge of how grounded cognition can account for abstract concepts, Barsalou (2008) writes that such challenges often arise because challengers assume that "conceptual content in grounded theories can only come from perception of the external world. Because people perceive internal states, however, conceptual content can come from internal sources as well." He goes on to write that (Barsalou, 2008):

Preliminary evidence suggests that introspective information is indeed central to the representation of abstract concepts (e.g., Barsalou & Wiemer-Hastings 2005, Wiemer-Hastings et al. 2001). Such findings

suggest that we need to learn much more about how people perceive and conceptualize internal states. Notably, people simulate internal states similar to how they simulate external states (e.g., Havas et al. 2007, Niedenthal et al. 2005). Thus, simulations of internal states could provide much of the conceptual content central to abstract concepts (Barsalou 1999).

The passage above notes "people perceive internal states" and again that "people perceive and conceptualize internal states." The use of the word perception here is significant and bears attention. This passage suggests that grounded cognition takes seriously something that could be analogous to what is called "mental perception" in the Buddhist tradition.

It is also worth noting that "knowledge as perception" is a much more dominant metaphor (or way of understanding knowledge) in the Indian traditions in general than "knowledge as representation" (of a state of affairs in the world), which has been a dominant model in the Anglo-American philosophical tradition, but which is not necessarily the dominant model in other western philosophical traditions, such as the phenomenological tradition (Dunne, 2004; Dreyfus and Thompson, 2006). Very broadly, one could say that the former is closer to the view advocated in theories of grounded cognition; whereas the latter is closer to the view of amodal theories, particular as amodal symbols appear to represent of states of affairs in the world independent of perception (despite, obviously, relying on earlier moments of perception). The strong focus on the role of perception in cognition, together with the acknowledgment of the fact of internal perception, means that the grounded cognition view appears to have some important points of connection to Buddhist theories of cognition and the mind, and Indian theories of mind and cognition more generally. A closer look at these parallels falls outside the scope of this dissertation, but would be a worthwhile study, as it might yield ideas for empirical research that could better resolve this theoretical dispute. Such a study should consider recent scholarship on *apoha* and concept formation in Buddhism (Siderits et al., 2011).

The above points do not attempt to make a direct case for grounded cognition as opposed to non-grounded theories when it comes to the study of contemplative practices. They are presented merely to show that one of the chief obstacles to dialog in the emerging field of contemplative science relates to the problem of dialog and collaboration involving conflicting models (cf. Dunne, forthcoming), and that grounded cognition may prove more amenable to non-grounded approaches because the model itself is closer on certain key points to Buddhist models of cognition.

As we have seen, grounded cognition suggests that the relationship between bodily states and affect/cognition is a two-way street: adopting certain postures and facial expressions leads to measurable changes in affect and cognition. Paul Ekman, for example, has found that forming facial expressions for fear, anger, disgust, and so on, triggers the associated emotions and their physiological responses (Ekman and the Dalai Lama, 2008);²⁵ and other studies have shown that smiling or frowning, even when the subjects were unaware that they were making an emotional expression (because they had merely been asked to hold a pencil in their teeth or lips), similarly resulted in changes in

²⁵ It should be noted that there is a significant debate regarding the universality of such emotions and their associated physiological responses. Russell's review of cross-cultural studies found fault with Ekman's approach and conclusions (Russell, 1994). See also Ekman's rebuttal (Ekman, 1994). Alternative theories, such as the psychological constructionist model supported by Russell, are presented later in this chapter.

affect (Barsalou et al., 2003; Niedenthal et al., 2005). In fact, Ekman's own theories of emotion and way of defining emotion makes it difficult for him to include compassion as an emotion, precisely because it seems to lack certain characteristics of emotions such as a distinctive facial signature (Ekman and the Dalai Lama, 2008). More recently, however, McEwan et al. (2014) developed a set of facial expressions that they felt depicted compassionate and critical emotions:

Rockliff et al. (2008) found that imagining somebody being kind to oneself increased heart rate variability (indicative of physiological soothing) and reduced cortisol (a stress hormone) in people with lower self-criticism but reduced heart rate variability and produced no change in cortisol in individuals with higher self-criticism. Similarly, in an fMRI study, Longe et al. (2010) found that when asked to be self- reassuring in a threatening scenario, individuals higher in self-criticism showed activation within brain areas associated with threat (e.g., amygdala). Clinical researchers have also found that depressed individuals can struggle with generating feelings of self- compassion, or being open and sensitive to the compassion of others (including the clinician). This tendency for those with certain traits such as higher self-criticism to struggle to process compassion may translate into an emotion-congruent effect on attentional processes, i.e., those higher in self-criticism may attend less to compassionate faces and attend more to critical faces or in other words, demonstrate a bias away from compassionate faces and a bias towards critical faces.

In view of the role that the evolution of attachment and affiliative behavior plays in mammalian and human development, echoing the work of Rochat (2009a) that we examined earlier, McEwan et al. (2014) argue that there would likely have developed an ability to recognize, process and respond to the altruistic, kind and caring intentions of others. The quote above does, however, require us to unpack how self-criticism may relate to compassion. This relationship may be complex. Some researchers on compassion, such as Neff (2005, 2007, 2011) and Gilbert (2005, 2010) contrast selfcriticism with compassion, and thereby tend to equate self-compassion with an attitude towards the self that is not critical. On the other hand, *Lojong*-based protocols such as CBCT, as we have seen, present self-compassion differently. In these approaches, selfcompassion actually includes a critical dimension towards one's own destructive emotional and behavioral patterns. The CBCT protocol (Negi, n.d.) states:

There is a connection between one's thoughts and emotions and one's happiness or unhappiness. Key to making this connection is the recognition that destructive emotions and reactions lead to the very unhappiness and unease that one wishes to avoid and that their cessation, along with the concordant positive mental states, gives rise to the peace and wellbeing to which one deeply aspires. The insight that happiness and unhappiness are states that arise from one's own mind, rather than being imposed by external circumstances, is powerful and transformative.

The emphasis that suffering primarily comes from the mind (in particular unhealthy and unrealistic attitudes and emotional and behavioral patterns) means that practitioners of CBCT are asked to take a critical attitude towards themselves in a certain respect.

Elsewhere, the protocol states quite explicitly, "In short, just about every problem that one experiences, personally or in the broader society, is a result of one's own selfishness and lack of concern for others" (Negi, n.d.). Such a critical attitude is very much in evidence in the source texts of the *Lojong* tradition from which practices such as CBCT were adapted. Śāntideva, for example, frequently takes a self-critical attitude in the *Bodhicaryāvatāra* (2.63, 5.61, 6.45, 7.14, 8.185), and in *Seven Point Mind Training* we find the line "Banish all blame to the single source" (Jinpa, 2006), which refers to the idea that all suffering and problems arise from one source, self-cherishing (*bdag gces*).

Protocols such as CBCT include additional material in order to prevent this critical attitude towards certain aspects of one's own mind from becoming a selfdefeating form of self-criticism. Far from leading to defeatism, the CBCT protocol goes on to claim:

This practice gives a strong boost to self-esteem, self-confidence and security. Rather than identifying with negative thoughts and emotions, one recognizes that they are superficial and adventitious, and one's fundamental nature remains pure, untouched by them.

In other words, if practitioners are able to make a distinction between their destructive patterns and themselves as individuals, the protocol seems to suggest that they will be able to combine a critical attitude towards the former with an acceptance of the latter. This interpretation is supported by the way a similar move is made in *Lojong* texts when it comes to generating compassion towards others as well. Śāntideva famously notes that since a stick that hits oneself is not acting under its own power, but rather under the power of the man using it, one should not get angry at the stick; similarly, since the man

himself is under the power of his anger, one should not get angry at the man (BCA 6.41) (Gyatso, 1997).

Metaphor, Liturgy and Ritual

Many of these findings suggest that types of processing on cognitive, affective, and embodied levels can be mutually supportive or mutually hindering. In other words, certain types of thought and affect are conducive for certain body postures, and vice versa. Barsalou et al. write, "In general, when embodied and cognitive states are compatible, processing proceeds smoothly. When embodied and cognitive states are incompatible, less efficient processing results" (Barsalou et al., 2003). For example, when subjects were asked to signal things they liked with a pulling of a lever towards them and things they disliked with a pushing of the lever away, they were able to complete the action more quickly than those for whom the association was reversed (Chen and Bargh, 1999). This concords with Lakoff and Johnson's (1980) arguments about the embodied metaphorical nature of language ("I feel close to him" vs. "I feel distant" or "I'm keeping him at a distance.") The optimal performance seen when embodiment, cognition, and affect are compatible may be due to the benefits of redundancy in situated simulations (Barsalou et al. 2003).

All this suggests that the conceptual metaphors that abound in the *Lojong* texts and their relationship to embodiment may be of particular interest if we are to understand these practices and concepts better. It is also important to point out that conceptual metaphors play an equally—if not more—significant role in the understanding or communication of abstract concepts. In this regard, the compassion that is to be cultivated in *Lojong* appears to rest upon a relatively concrete and fundamental basis common to human beings, namely, a biological basis for compassion as evidenced by the practices that begin with one's mother (Jinpa, 2006). Nevertheless, the actual type of compassion to be cultivated—completely altruistic, unbiased, universal compassion that is grounded on an understanding of suffering on its deepest level, including some degree of realization of the ultimate nature of reality—ostensibly lies far beyond the experience of ordinary individuals and remains a highly abstract concept. This may be why the *Lojong* texts employ a remarkable number of metaphors when it comes to compassion using a veritable host of metaphors—some his own and some in the citations he includes. In his section extolling the characteristics of compassion, he says it is a "seed," "a gateway," "an entrance," "an ultimate instruction," "a height from which one can fall," "a life force," "an essence," "the quintessential butter," "a basis," "a wish-granting tree" and "a sacred jewel of the mind" (Tsongkhapa, 2005).

As noted, an embodied cognitive perspective suggests that contemplative practices may be combining body practices, thought processes, affect, and words in ways that are mutually supportive in creating powerful transformative experiences and changes in subjectivity over time, although this remains an empirical question that must be answered. However, there is a further step that can be taken: most contemplative practices do not merely create one embodied cognitive-affective state; rather, they tend to be arranged in a sequence or "liturgy" of practices that move from one state to another. These states are not unrelated to each other; rather, they reflect an embodied cognitive logic, whereupon a prior state induces a subsequent state, much in the way that a logical syllogism induces an inference. In other words, the liturgy of the ritual practice (such as in a sequenced *Lojong* or deity yoga practice) evokes certain cognitive-affective states that then facilitate other states in a dynamic causal relationship. Grounded cognition provides a theory that could help to explain how the rehearsal of such sequenced practices, either through recitation or through contemplation, which is so highly valued in the tradition itself, might effect changes in cognition, affect, and the body itself.

In certain cases, we find practices that are explicit about this connection. For example, in a text by Padmasambhava, a saint of legendary proportions who is credited as one of the key figures who brought Buddhism to Tibet from India, the author gives precise instructions on how to cultivate the appropriate sense of disillusionment with cyclic existence (*saṃsāra*) that is necessary for embarking upon true spiritual practice. What is remarkable is the precision of the body postures that should be adopted to bring about this state of mind. Moreover, these body postures are to be combined with specific vocalizations and thoughts:

First, go by yourself to a place that arouses disillusionment. If possible, go to a deserted place, broken-down ruins, a field of dried grass rustling in the wind, or an eerie place...

In terms of posture, sit on a comfortable cushion with one leg folded. Plant your right foot on the ground, press your left leg against the ground, rest your right elbow on your right knee, press your palm against your right cheek, and clasp your left knee with your left palm. This posture will lead to stark depression. Then with your mind ponder the sufferings of the cycle of existence, and with your speech occasionally utter these words, letting them arouse your mindfulness: "Alas, alas! Wretched me! This cycle of existence is suffering. Nirvana is joy!" (Wallace, 1997:17-18)

It is important to stress that the recognition of regularities in cognitive and affective processing that take place due to shared features of our embodiment and our environment, and that seem at least at a basic level to transcend cultural and religious differences, should not in any way efface the importance of those very differences and the ways they can impact processing. The "nature vs. nurture" divide is an artificial one, just as current thought in epigenetics increasingly sees the relationship between genes and the environment as an interdependent one rather than a clean and fast division. As Nathaniel Barrett (2010:602-3) points out:

In contrast, an interactive approach sees convergent patterns of human behavior—even universal patterns—as jointly constructed by innate biases and environmental regularities, including the socio-cultural regularities of a particular historical context. The outcome of this joint construction may be so stable and widespread that it seems fixed or "hard-wired." But once we admit the possibility of accounting for patterns of human behavior in this way, we raise the question of how the reshaping of our environment creates new landscapes, with new patterns of convergence—which is to say, new kinds of cognitive possibilities—and we thereby open the door to considerations of how human behavior is *continuously evolving* as a dynamic biocultural system. All three sub-areas of grounded cognition (embodied cognition, simulation, and situated cognition) have significant implications for the study of contemplative practices. The Tibetan word typically translated as "meditation" (*sgom*) has the meaning of "familiarization." In most, if not all, meditation practices, the practitioner is familiarizing themselves with a particular meditational object or is cultivating (and thereby familiarizing with) a particular affective state (such as love or compassion) by repeatedly generating the mind into that state and maintaining it. Repetitive training is a feature of most contemplative practices (it is this, in part, that makes them "practices," things that are to be practiced, related to skills, states and traits that are to be cultivated over time.) In both styles of meditation, old associations are replaced with new ones. A practitioner who meditates on his mother and recalls all the kindnesses she has done for him must do so repeatedly (a standard practice in the *Lojong* tradition of Tibetan Buddhism). In his commentary on *Seven Point Mind Training*, Se Chilbu explains the process of engaging in one such meditation:

Seated on a comfortable cushion, visualize your dear mother vividly in front. First, to cultivate loving-kindness and compassion, reflect in the following manner... "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. (Jinpa, 2006:94)

Grounded cognition contributes to understanding these processes in a number of ways. One is in examining how such meditations might affect perception of individuals outside of the actual meditation session. As Barsalou (2008:624) writes:

The simulation process central to accounts of grounded cognition plays ubiquitous roles in perception. During perception, states of perceptual systems become stored in memory (e.g., for vision and audition). Similar stimuli perceived later trigger these memories, simulating the perceptual states they contain. As these simulations become active, they produce perceptual inferences that go beyond perceived stimuli in useful ways. Goldstone (1995) taught people simple associations between a shape (e.g., square) and a color (e.g., dark red). Later, when a colored shape was flashed (e.g., a red square), and participants had to reproduce its color, they distorted the color towards the prototypical color associated with the shape seen earlier. Perceiving the object's shape activated a simulation of its prototypical color, which then distorted perception of the current color. Hansen et al. (2006) similarly showed that simulations of an object's natural color (e.g., yellow for banana) distort achromatic perception of the object (e.g., a gray banana) toward the opponent color (e.g., a bluish banana).

If very small-scale interventions like the ones used in these studies can affect color perception of objects, it is quite possible that intensive meditation along the lines of the *Lojong* practices described above would also change the perception of persons. We have seen some slight empirical evidence that is beginning, in a small way, to support this view in the form of changes to the processing of empathy as a result of compassion training (Klimecki et al., 2012; Mascaro et al., 2013). The meditation here serves as a form of conditioning. Moreover, if carried through to the degree advised, namely to the point where one has "cultivated a depth of emotion such that tears fall from your eyes and the hairs of your pores stand on end," the mere perception of one's mother (or another sentient being, if one has been able to extend the association out that far) may trigger the memory shaped during the meditation session(s), simulating concordant affective, cognitive, and bodily states. This would be a valuable topic for further research.

One could certainly argue that a non-grounded view could account for such effects, merely through association. The difference in the grounded view is that it explains very clearly why there are such powerfully interconnections between perception, affect, and cognition, namely because when conceptual information is processed, it calls upon all the relevant modalities and bodily states activated previously during perception. In other words, the bodily states and affect experienced by an individual when perceiving their mother (for example) may have developed along a trajectory of increasing negativity. When the mother is then perceived in the meditation, or in real life, it triggers not only conceptual knowledge in the form of amodal symbols, but a strong affective and physiological response. The meditator is instructed to visualize the mother, triggering such modal information and related bodily and affective states. Then, working on the perception of the mother during the meditation involves replacing not only abstract conceptual knowledge about the mother, but also the affect and embodied emotional

knowledge related to her. When that process reaches the point of catharsis described in the passage above, the restructuring of the conceptual knowledge about the mother has involved a complex simulation involving mental imagery—and hence visual processing, since the two are importantly connected and largely overlapping (Kosslyn, 2005) powerful affect, and the bodily state of crying. Undoubtedly, advocates of non-grounded theories would account for such processes in different ways, but a grounded view maintains a degree of explanatory power and cohesiveness in accounting for this meditation practice that non-grounded views lack, particularly when it comes to the importance of simulation in the meditation process, visualization, and the generation of bodily states and emotions that are concordant with the cognitive changes that are sought after.

Humanities and social science approaches in religious studies have long argued for the importance of ritual practice, just as one example, strongly emphasizing that ritual does something, that it is productive, that it is more than empty gesture (Bell, 1992; Lawson & McCauley, 2002; McCauley, 2011). The mere fact that this case needs to be made reflects a bias against grounded cognition; it reflects the idea that bodily action and speech (in rituals, for example) should not have any direct or profound impact on cognition and affect. Grounded cognition provides important evidence that could be used to support the case being made for the productivity of ritual in religious studies and fields like anthropology, and it also provides increasingly developing theoretical models for understanding how such ritual action take place. Moreover, grounded cognition can be helpful in suggesting concrete tools for investigating the effects of ritual practices.

The same can be said for the study of contemplative practices, which are typically ritualized and many of which could arguably be seen as a subset of ritual practice. In Tibetan Buddhism, for example, great emphasis is placed on the memorization and daily recitation of religious texts (Dreyfus, 2003). It is strongly believed in the Buddhist tradition that such memorization and recitation has a positive impact on the mind of the practitioner. To some western practitioners of Buddhism, however, rote memorization and recitation can seem meaningless, and they may believe that simply saying words out loud every day will have no impact on their mind. In some cases, recitations are coupled with hand and other body movements (such as the hand gestures associated with tantric practice) and such movements can also be seen as meaningless.

Existing work in grounded cognition already suggests that such movements and such recitations would not be non-productive, but rather would likely influence the cognition and affect of practitioners by activating simulations corresponding to the content of the texts and the nature of the physical gestures being performed. It remains to engage in actual research studies on this, however. For example, does the practice of bowing—a near universal practice, and one that is heavily emphasized in various forms in the Buddhist traditions—in fact have an inhibitory effect on pride and facilitate cognitive and affective states related to humility? The same methods currently being applied in the study of grounded cognition could be applied to answering this question. This is clearly an area ripe for further research.

Once such studies are underway, more complex studies can be developed that look at the actual sequencing of ritual and contemplative practices. Such practices typically do not involve a single embodied cognitive state, but rather a sequence of such states that move in an ordered fashion. I refer here to what would be called a liturgy in the Christian traditions; in the Buddhist traditions one also sees this sequencing of practices in the various ritual ceremonies that are performed as well as in sequenced and manualized meditation instructions for effecting a particular attainment. What is interesting is that such contemplative practices place great emphasis on the ordering of these embodied cognitive states,²⁶ as if one state prepares the way for the next, and as if their combined practice, done in the right sequence, yields a greater result than the individual activities being done on their own or out of sequence. Elsewhere, I have put forward one possible model called "embodied cognitive logics" in which grounded cognition could be applied to sequenced contemplative practice in this way (Ozawa-de Silva, 2014a; Ozawa-de Silva & Dodson-Lavelle, 2011), but empirical research needs to be done to further develop such models.

The theory of pattern completion and inhibition already laid out by Barsalou et al. (2003, 2005) already provides a partial theoretical model for accounting for such processes. For example, Barsalou et al. (2005:29) write, "people establish entrenched simulations of frequently-experienced situations, where a given simulation includes (among many other things) a variety of bodily states, such as facial expressions, arm movements, and postures. When environmental cues trigger the simulation of a social situation, part of the simulation is expressed in relevant bodily states. Conversely, if the body is configured into a state that belongs to one of these simulations, the state retrieves the simulation, which then affects social information processing." Thus far experiments

²⁶ An example would be the ordering of practices in a Buddhist *sādhanā*, an ordered (typically tantric) practice for achieving realization. See for example Gyatso & Hopkins, 1985.

seem to have concentrated on quite basic actions, studying how certain bodily actions such as pushing something away or looking downward relate to negative affect, whereas pulling something towards oneself or looking up relate to positive affect (Barsalou, 2008). Recently work has been done employing approaches developed in grounded cognition to the study of emotions (Wilson-Mendenhall, 2011). Based on this work, it would appear that we are ready to engage in a research program that critically examines the claims forwarded in Buddhist psychology regarding which mental states act as antidotes or opposites to other mental states, and furthermore, which mental states facilitate or serve as prerequisites to others. Moreover, turning to Buddhist models for initial guidance would jump-start such research by suggesting which cognitive-affective states to look at first and how they might rely on others. As has been pointed out, research funding is limited, and this is one way in which contemplative science can contribute to general research in psychology, cognitive science, and neuroscience (Dunne, forthcoming). The idea here would not be to accept at face value what the Buddhist tradition already claims, but to use its claims as a starting point, thereby potentially saving the time of starting blindly.

One example of such a study would be to take a sequenced practice, such as CBCT or a deity-yoga practice, and intentionally alter the order for one group of practitioners, who would serve as the control.²⁷ Similar tasks to those already employed

²⁷ As of the initial writing of this chapter, no such study had been undertaken. Since then, however, such a research design has been employed by Tania Singer, and preliminary results were presented at the International Symposium for Contemplative Practice in Boston in October, 2014. This study has not yet been published and the presentation is not yet available for public viewing. The preliminary results presented by Singer, however, strongly suggested that different sequencing of practices yields measurably different results.

in grounded cognition studies could then be applied, in addition to real-time neuroimaging. One would thereby test the hypothesis that the practices when done in the correct order have a larger effect size than when done out of order, and one may also be able to isolate specific effects. One would have to recognize, however, that there may be individual differences with regard to which order is most efficacious as well as which practices are most efficacious; indeed, one finds significant variation within the Buddhist tradition itself. Similarly, one could examine practices that involve combining verbal recitation, mental focus on a particular object or mental cultivation of a particular affective state, and bodily action, by studying the effects of such practices when fully combined as opposed to when engaged in isolation from one another. An empirical investigation of mental states and bodily ritual actions along these lines would have the potential to lead to a wealth of new information about the nature of cognition and could have profound implications not only for our understanding of contemplative practices, but also for the design of therapeutic interventions.

A further idea for research would be to engage in studies using approaches like the one outlined above but combined with first- and second-person neuroscience approaches, such as those employed in the model for neurophenomenology laid out by Lutz and Thompson (2003), and based on a sophisticated approach to contemplative phenomenology itself (as attempted earlier in this dissertation). Existing approaches and tasks employed in studies of grounded cognition would be readily adaptable to a neurophenomenological study that included first-person reports, which could themselves be generated through certain bodily tasks and movements, or combined with them. Adding a neurophenomenological element to the study of grounded cognition, particularly within the context of the study of contemplative practices, could provide rich and interesting data, and perhaps even new theoretical models.

Psychological Theories of Emotion and Emotion Regulation

A full exploration bringing contemporary research on the emotions into dialogue with contemplative practice—or even a single contemplative tradition like *Lojong*— would require at least a volume or volumes, but a useful overview of this research can be provided here and then applied to the *Lojong* tradition, illustrating how this work applies to a particular contemplative practice and thereby how it can contribute to contemplative science and positive psychology. Although many disciplines deal with research on emotions, my focus here will be on research in cognitive psychology and, to a lesser extent, cultural psychology and anthropology.

In engaging in this comparative project it is helpful to distinguish between emotion generation and emotion regulation, since this is a relevant distinction both within contemporary scientific discourse and also within contemplative traditions. After reviewing some of the major theories with regard to emotions in psychology, I will bring them into dialogue with specific Buddhist theories of mind. Since the vastness of such Buddhist traditions will prevent a comprehensive comparison, the focus will be on applicability to the *Lojong* tradition, contemplative science and positive psychology. I will then turn to the question of emotion and culture, an important aspect of the appropriation and secularization of contemplative practices that is often ignored in both contemplative science and positive psychology. One recurring theme throughout will be the question of the universality as opposed to the constructed nature of emotions. I will examine this question from several angles, and conclude by suggesting that the differences that arise in the various theories of emotions prevalent in contemporary scholarship may arise from attending to emotion and cognitive processing at different levels (focusing on the biological as opposed to cultural and linguistic expressions). In this last section I will explore the idea that our use of a single term "emotion" may mistakenly imply that we are all talking about the same objective entity; but if the term and category "emotion" itself is constructed, then our discourse about emotion may be stymied if we do not recognize and address this fact. Nevertheless, the constructed nature of a term like "emotion" does not mean that certain constructions of this term cannot pick out relatively stable and universal aspects of human experience that result from our shared embodiment, while other constructions of the term may point out the incredible diversity of emotions.

One might ask why psychological theories of emotion, emotion generation and emotion regulation are relevant to understanding the *Lojong* tradition. One reason is that psychological theories form a significant part of the currency of discourse in contemplative science and positive psychology. Within these two domains, therefore, if we are to understand traditions like *Lojong*, we are greatly benefited if we do so in a way that places indigenous Buddhist theories alongside the models of psychology. Furthermore, the study of emotion regulation in psychology appears to line up very well with the processes we have examined in *Lojong*. Barrett et al. (2013), for example, give the following as an example of theories that posit emotion generation and emotion regulation as two discrete processes:

In the process model of emotion regulation... an emotion can be triggered first and then is subsequently regulated (e.g., you are walking in the woods, and a fuzzy bee buzzing around your head triggers a state of fear, which you then regulate by suppressing the urge to run and by distracting yourself with a close examination of the local scenery, such as an interestingly shaped rock or tree). Regulation might also occur before the response occurs, preempting the emotion from ever taking place (e.g., before you start your walk, you might remind yourself that bees are a part of nature, pollinate beautiful flowers, and make delicious honey). Regardless of which comes first, the emotion is separate from its regulation (Barrett et al., 2013).

Seen from this perspective, *Lojong* can be approached as a set of practices aimed specifically at emotion regulation. Barrett et al. (2013) disagree with this model, however, and place themselves within a constructionist camp of emotions, as we shall see. Since whichever form of psychological theory we adopt will determine how we understand *Lojong* practices within the domain of contemplative science, it is important that we acquaint ourselves with these theories, recognizing the strengths and disadvantages of each.

Despite the presence of a sizable literature on emotions in a variety of fields, including psychology, sociology, anthropology, philosophy, neuroscience and other disciplines, there is no broad consensus as to how to actually define an emotion. Gross and Barrett (2011) note that "emotion" typically refers to a collection of psychological states that include "subjective experience, expressive behavior...and peripheral physiological responses," but acknowledge that these are also characteristic of a number of mental states that are not typically considered emotions. Despite the difficulty in defining the central term in question, contemporary approaches to the study of emotions can be broadly grouped into three categories in terms of how they understand emotions: basic emotions models, appraisal models, and constructionist models.

According to basic emotions models (Ekman, 1992; Ekman et al., 2003; Panskepp, 1998; LeDoux, 1996), emotions are biologically-defined products of human evolution and hence universal. Such models tend to see emotions as relying upon discrete and unique dedicated mechanisms that cause consistent behavioral and physiological responses. Often such views also see emotions as "natural kinds." Since we will return to this point later, it is helpful to quote at length Barrett's (2006) explanation of what this means:

A natural kind is a collection or category of things that are all the same as one another, but different from some other set of things. These things may (or may not) look the same on the surface, but they are equivalent in some deep, natural way. In the most straightforward philosophical sense, a natural kind is a nonarbitrary grouping of instances that occur in the world. This grouping, or category, is given by nature and is discovered, not created, by the human mind. In a natural-kind category, instances cluster together in a meaningful way because they have something real in common.

Since emotions are natural kinds, there would be a definite number of emotions and their characteristics would not be dependent upon cultural or linguistic norms. Proponents of basic emotions models differ in terms of how many basic emotions they recognize, and whether they believe that other, more complex emotions can be built out of, or elaborated from, basic emotions (Gendron & Barrett, 2009). Basic emotions proponents tend to agree that emotions form a unique type of mental event, that they are discrete, and that they generate consistent patterns of subjective experience, expression, and physiological changes (Ekman et al., 1972; Izard, 1971; cf. Gendron & Barrett, 2009). Some, such as Ekman, tie basic emotions to relatively fixed muscle changes in the face which are related to the signaling of the emotion to conspecifics (Ekman and Friesen, 1971).

Like basic emotions models, appraisal models see emotions as representing a unique type of mental event not reducible to perception, cognition or other processes. Appraisal models hold, however, that emotions are not caused directly by events in the environment, physiological processes, facial expressions or other such stimuli, but rather are elicited by evaluations (appraisals) of events and situations (Scherer et al., 2001). After a relationship has been broken off, for example, sadness is experienced because of an appraisal of the situation that concludes that something desired has been lost and cannot be regained (Scherer et al., 2001). A regulating function (the appraisal) therefore acts as an antecedent to the emotion in that it interprets information from the world through a more elaborated "meaning-making" process than is typically the case in basic emotions models. The appraisals (which can either be fully distinct from the emotions, or integrated into the emotions, depending on the model) then determine which emotion is triggered, with the corresponding subjective, behavioral and physiological responses. For example, according to this theory, two individuals could respond to a similar stimulus with different emotions due to different appraisals of the situation. By positing a more complex relationship between stimuli and responses, appraisal theory creates a degree of added flexibility in terms of accounting for the individual's emotional response to a given situation, but it also weakens the case for the universality of basic emotions.

Those who advocate for "constructionist" models see even greater variability in responses associated with emotions across contexts and cultures, and question whether emotions refer to unique mental states at all. Advocates of constructionism see emotions not as natural kinds nor as a unique category of mental states, but rather as constructs reducible to other factors.

There are two main forms of constructionism: psychological constructionism and social constructionism. In psychological constructionism, emotion is also an act of meaning-making, but it is not considered a unique type of mental event or process. Furthermore, the act of meaning-making includes making meaning of internal affective and sensory states, not just information in the environment. Importantly, psychological constructionist models, unlike basic emotions models and most appraisal models, see emotions as constructed of more basic cognitive events and processes, rather than as irreducible entities. By introducing the aspect of meaning-making as central to emotions, appraisal and psychological constructionist models. Emotions are not merely the straightforward and virtually automatic responses that have evolved to respond to particular stimuli. Rather, they are complex processes that depend on meaning-making and interpretation. If the meaning-making or interpretive process is changed, therefore, the emotion response to a given stimulus will also change.

Since psychological constructionism does not see emotion generation as a unique process separate from other forms of cognitive processing, it has less room for recognizing a clear-cut distinction between emotion generation and emotion regulation. Still, Gross and Barrett (2011:13) argue that even from such a perspective:

The distinction between emotion generation and emotion regulation might be useful and real in an ontologically subjective way, even if it does not reflect a biological distinction (Barrett, 2009). The generation–regulation distinction might lie in the subjective experience of agency or will. Emotion generation might refer to instances when there is no sense of agency in making an affective state meaningful, whereas regulation refers to instances that are accompanied by an experience of agency. To understand emotion regulation, then, is to understand the nature, causes, and functions of this phenomenological distinction.

This is a particularly fascinating statement when seen from the perspective of *Lojong* and contemplative science. As we have seen in the preceding chapter, *Lojong* involves a contemplative phenomenological method aimed at transformation, whereby cognitive processing of stimuli is actually changed over time through repeated practice and conditioning. According to what Gross and Barrett are saying here, if an individual were to train in *Lojong* techniques such that their negative emotional responses to certain stimuli were attenuated (or positive responses to others were strengthened), they would experience this as a change (an enhancement) in their sense of agency. It is this phenomenological distinction that would give the sense of enhanced emotion regulation skills, whereas Gross and Barrett would argue that the actual emotion generation itself

has shifted. Of course, it is possible that with further training, the same stimuli would cease to trigger any negative emotional response whatsoever; this would align with Gross and Barrett's constructivist viewpoint, namely that it is not that a generated emotion is now being regulated better, but that the entire process of emotion construction has shifted such that the emotion no longer arises in the face of that situation or stimulus. Here we see a place where a contemplative phenomenological approach and attention to contemporary psychological theories can yield areas for fruitful further research in contemplative science.

Social constructionism goes further than psychological constructionism by situating emotion not within more basic psychological processes, but in social norms and scripts that are learned, and that are historically and culturally contingent creations. This is a common position for those outside the field of psychology, such as those in religious studies and anthropology (e.g. Lutz, 1988). Recall that for basic emotions theorists who subscribe to the idea of "natural kinds," a natural kind is "a nonarbitrary grouping of instances that occur in the world... given by nature and...discovered, not created, by the human mind" (Barrett, 2006). Naturally, this is just the sort of thing that is critiqued in the humanities, cultural anthropology and religious studies. As Gergen (1985:267) writes:

Constructionism asks one to suspend belief that commonly accepted categories or understandings receive their warrant through observation. Thus, it invites one to challenge the objective basis of conventional knowledge... In Averill's extensive work on emotion one is forced to question the assumption that anger is a biological state of the organism and is invited to consider it as a historically contingent social performance.

Since social constructionists focus most on emotion variability, more will be said on social constructionism in the section on the cross-cultural study of emotions below.

Following on from the work of Margaret Mead (1973), anthropologists Lutz (1988) and Scheper-Hughes (1993) argue that emotions vary widely cross-culturally to support the idea of social construction. Lutz (1988) proposes that emotion words index cultural scenarios (or schemas) about typical situations in which those emotions are felt, and are therefore very closely tied to the culture and cultural difference. In contrast to Ekman's (1992) argument that the recognition of emotional facial expressions across cultures supports the universality of basic emotions, Lutz argues that understanding the meaning of an emotion word requires being able to envisage "a complicated scene with actors, actions, interpersonal relationships in a particular state of repair, moral points of view, facial expressions, personal and social goals, and sequences of events" (Lutz, 1988:10). Recently, work by Lisa Barrett and colleagues has provided further empirical support for the concerns raised by Lutz regarding the effects of emotion words and also the cultural variability of emotions (Gendron et al., 2012, 2014), although her interpretations of this work have been questioned by Ekman and Keltner in a rebuttal (Ekman & Keltner, 2014).

In reading the work of cultural psychologists and cultural anthropologists on emotion, however, one is clearly struck by the fact that they are not employing the term "emotion" to refer to anything similar to what basic emotions theorists, for example, are. For Ekman, for example, an emotions last only for a few seconds and "love," which Lutz spends a great deal of time exploring and which she uses to contrast American concepts of love with those used by the *ifaluk* people, is not even a basic emotion for Ekman

(Ekman, 1992). One therefore feels that much of the conflict in views arises from confusion about what the term "emotion" is referring to, and different levels of analysis. This is natural given the disciplinary divides and differences in method (methods employed in psychology as opposed to ethnography, for example). Fuller (2007:26) notes this when he writes:

A host of studies have appeared in recent years, examining how specific religious traditions regulate their adherents' expression of emotion. Among these are studies of praise and emotion in Hindu India (Appadurai 1990; Sharma 1987), love and sympathy in Theravada Buddhism (Aronson 1980), emotion and revivalism in American Protestantism (Corrigan 2002), and the relationship between emotions and ethics in South Asian Buddhism (Trainor 2003). Implicit in these studies is a theoretical wariness of efforts to find universals in human nature such as Freud, Otto, and Schleiermacher did in their analyses of the role of the relationship between emotion and religion. Indeed, almost every study of emotion by humanities scholars in the last two decades has been guided by one version or another of constructivism. That is, most studies of emotion in the humanities assume that human experience is 'constructed' by culture and, therefore, fail to utilize multi-disciplinary insights into bodily sources of thought and feeling.

Here, part of the disagreement seems to arise because basic emotions researchers such as Ekman focus on the somatic components of emotion in favor of its social and expressive components (beyond facial expression), whereas for others, particularly cultural psychologists and cultural anthropologists, these latter components are not epiphenomenal but rather basic, constitutive elements of emotion (White, 1994). Instead of trying to argue over what the constitutive elements of emotion really are, as if they were objectively set by nature, however, there may be other solutions to this problem.

Because emotions are seen as socially constructed scripts and performances in such models, it is not clear how a distinction between emotion generation and emotion regulation would be meaningful within a social constructivist model. This might appear to be a weakness of social constructionism, especially as emotion regulation does appear to be a phenomenological reality for many people (as noted in the above discussion of the Gross and Barrett quote). Nevertheless, a significant amount of psychological research points in the direction of distrusting phenomenological or introspective methods when it comes to accurately reporting on mental states and motivations (Fiala & Nichols, 2009; Nisbett & Wilson, 1997). One could also argue that emotion modification (whether in generation or regulation) is itself inherently a social and cultural process; in other words, emotion modification itself is also placed squarely within the realm of the social, cultural and historical. Therefore, this could be seen as either a strength or a weakness of this approach.

Comparing Psychological and Buddhist Models

One could probably align each of the stances presented above with certain aspects of the Buddhist tradition. For example, certain aspects of the basic emotions theory seems to fit with certain parts of Buddhist theory on mental states. The Buddhist model of "mind and mental factors" (Tib. *sems dang sems byung*) enumerates a specific set of mental factors, many of which would be classified as emotions in modern psychology. Similar to the views of some basic emotions theorists, some of these destructive mental states (Tib. *nyon mongs*) even appear to be the roots of secondary destructive mental states (Berzin, 2006). From the way that Buddhist texts address these mental states, it would appear that they are universal, not dependent on culture, and not socially constructed, especially as all Buddhist traditions hold that they occur not only in the mental continua of human beings, but of other sentient life forms as well, including animals.

While the basic emotions approach would therefore have some things in common with features of Buddhist traditions, it would be premature to conclude that it is the model that best aligns. The *Lojong* tradition, as we have seen, is based on the premise that individuals do have the capacity to change emotion responses, and typically in ways that appear to go well beyond most basic emotions models. Whether this takes place through emotion regulation or changes in how emotions are generated is not at first clear. Those traditions, such as *Lojong*, which rely on cognitive strategies for changing emotional responses would appear to align more with appraisal and psychological constructivist theories than with basic emotion and social constructivist theories. This is because in *Lojong*, emotional states are classified as entirely different types of mental states from other cognitive processes; nor do they even appear to be emergent categories. *Lojong* would appear, from this perspective, to align most closely with non-emergent psychological constructivism.

In terms of the question of emotion generation vs. emotion regulation, *Lojong* practice texts appear to teach ways for transforming emotions in both of the ways noted

above by Gross and Barrett. In other words, this can occur early on, by engaging in transformation so that an emotion does not arise; catching it right before it arises; or catching it right after it arises. It can also occur after an emotion has started to develop or has developed, by noticing an emotion that has already arisen and seeking to transform it, for example by recognizing its true nature; modifying or intensifying an emotion that has been generated; bringing an emotion online and then attempting to weaken or undermine it by employing various strategies. One of the strategies employed, that of cultivating an emotion's opposite or "antidote" (Tib., *gnyen po*) in order to weaken that emotion (e.g., meditating on compassion or patience in order to decrease anger), itself appears to be in conflict with a basic emotions model, because basic emotions do not have opposites within that set.

We should not give the impression, however, that there is a single "Buddhist psychology" to which we can refer and which we can place alongside the theories that have been developed in modern psychology. The Buddhist tradition is itself multidimensional, just as modern psychology is. While the models laid out in Buddhist *abhidharma* texts that deal with mind and mental factors appear to treat emotions as rather discrete entities that appear to have a degree of objective existence and that can be defined in terms of their own characteristics, such approaches are closely tied with "realist" philosophical approaches. They are therefore the target of deconstruction by the Prāsaṅgika-Madhyamaka philosophical tradition, which rejects the idea that anything, including emotions, exists objectively and independently of mental construction. The Prāsaṅgika-Madhyamaka approach clearly conflicts with the idea of emotions as "natural kinds" outlined above, and actually bears many similarities to constructivist approaches. For example, in a passage that would appear to align with Prāsaṅgika-Madhyamaka, Gergen (1985) notes that "Emotions are not objects 'out there' to be studied, ventured Sarbin; emotion terms acquire their meaning not from real-world referents but from their context of usage." Gergen's reference is to Sarbin (1984) whose ideas were influenced by Wittgenstein's (1953) *Philosophical Investigations*. Examining phenomena as diverse as suicide, menopause, schizophrenia, altruism, and childhood, social constructivists have concluded that "the objective criteria for identifying such 'behaviors', 'events', or 'entities' are shown to be either highly circumscribed by culture, history, or social context or altogether nonexistent" (Gergen, 1985:267).

Lastly, there are styles of practice and models of mind in the Tibetan Buddhist tradition that abandon altogether the idea of gradually eliminating destructive emotions or regulating them through the application of antidotes. Examples are subitist approaches in the Mahāmudrā and Dzogchen traditions of Tibetan Buddhism. Van Schaik (2004:4) quotes from a text found at Dunhuang from this tradition that states:

It does not matter whether all of the phenomena of mind and mental appearances, or affliction and enlightenment, are understood or not. At this very moment, without accomplishing it through a path or fabricating it with antidotes, one should remain in the spontaneous presence of the body, speech, and mind of primordial buddhahood.

A contemporary example of a Dzogchen approach being used as an intervention is Makransky's (2007) compassion meditation program, which sees mental states such as compassion as already fully present in an individual's mind, a viable position based on the psychology of this particular Buddhist tradition, but not one that appears to have an analog in contemporary psychology or neuroscience.

If we set aside such traditions and focus on Lojong, however, I feel there are strong arguments for concluding that of the available psychological theories on emotions, that of psychological constructivism will be most beneficial for the purposes of contemplative science. There are several reasons for this. Firstly, contemplative traditions like Lojong envision the possibility of the complete eradication of certain emotional responses, a transformation that is much more radical than allowed for in basic emotions theories. Secondly, they employ cognitive strategies to effect this change; basic emotions theorists, on the other hand, tend to see emotional responses as impervious to cognitive control. Thirdly, as noted, *Lojong* employs techniques (such as the "antidote" technique) that appear confusing from a basic emotions viewpoint, since almost all basic emotions do not have opposites. Fourthly, the *Lojong* tradition (and the Buddhist traditions in general) does not distinguish "emotions" as a distinct type of mental state separate from other cognitive processes-both basic emotions and appraisal theories do, while psychological and social constructivism do not. Fifthly, because they do not separate out emotion as a distinct category from other cognitive processing, psychological constructivist models align more suitably with grounded cognition models, which we have shown are highly useful for contemplative science (see, for example, the collaboration between Barsalou and Barrett in Barrett et al., 2013). Lastly, yet very importantly, psychological constructivism appears more amenable to establishing a clear link between emotion regulation and the cultivation of ethical subjectivity, a link that is very strong within the *Lojong* tradition, but tends to be ignored in psychology. Recall

here Gross and Barrett's (2011) suggestion that "The generation–regulation distinction might lie in the subjective experience of agency or will."

Relevance for the Contemplative Science of Lojong and Compassion

The debates over psychological theories of emotions are important for a number of reasons—not merely because certain models may line up better than others in seeking to understand the processes that are involved in *Lojong* practice, but also because it is of great importance to contemplative science as a whole whether we consider the emotions and mental states we are studying to be psychologically or socially constructed, or not. This is especially important as contemplative science is virtually by definition a crosscultural enterprise, since it involves bringing together ancient traditions of contemplative practice (largely from Asian cultures) and contemporary scientific methods and paradigms (largely developed in the West). It matters a great deal, therefore, whether the emotions and mental states being studied in contemplative science (and by extension positive psychology) are universals across cultures and historical time periods, or whether they are constructions that change across these contexts and have no constant characteristics.

Here we will restrict our assessment to research on two such constructs: empathy and compassion. In an overview of the literature on empathy, Batson (2009) notes that there are at least eight different uses of the term empathy current in research today. He also notes that some researchers define "empathy" in precisely the way that other researchers define "sympathy," and vice versa. The uses of empathy that Batson reviews include: (1) Knowing another person's internal state, including thoughts and feelings; (2)
adopting the posture or matching the neural responses of an observed other; (3) coming to feel as another person feels; (4) projecting oneself into another's situation; (5) imagining how another person is thinking and feeling; (6) imagining how one would think and feel in another's place; (7) feeling distress at witnessing another's suffering; and (8) feeling for another person who is suffering. In fact, even a cursory look at the literature on empathy actually reveals an even greater number of definitions and constructs than these eight summarized by Batson. It would appear that most of these definitions can be divided into three camps, however: those who focus on the cognitive dimension of empathy (knowing another's emotional or, more broadly, mental states); those who focus on the affective dimension (feeling an emotion appropriate to the experience of the other); and those who believe both cognitive and affective dimensions are necessary for empathy.

Singer and Lamm (2009:82) define empathy in the following way: "We 'empathize' with others when we have (1) an affective state (2) which is isomorphic to another person's affective state, (3) which was elicited by observing or imagining another person's affective state, and (4) when we know that the other person's affective state is the source of our own affective state." They acknowledge, however, that "there are almost as many definitions of empathy as there are researchers in the field." While undoubtedly useful, this definition is problematic in that it leaves out a great deal of what is considered to be empathy both by other researchers (as noted in the definitions above) and popular usage of the term. One illustrative example will suffice. On Singer and Lamm's model, a mother seeing her teenage daughter drinking, partying, doing drugs and "having the time of her life" at a college party (and thereby experiencing a temporary positive affect at the time), would feel empathy if she experienced a positive affective state isomorphic to her daughter's illusory happiness. Yet for a mother to experience happiness at seeing a daughter's state that is in a wider context a state of suffering is counterintuitive. It is equally possible to see that the mother is empathizing if she feels concern and sadness, rather than joy and happiness, regardless of her daughter's affective state. This illustrates the lack of clarity with regard to the differences between empathic concern and empathy as affective resonance. Recognizing isomorphic affective states may serve great purpose, and may form a part of our picture of empathy, but to call such characteristics by themselves "empathy" appears problematic.

Like the term for "emotion" itself, no clear corresponding term appears in the Buddhist literature in Tibetan or Sanskrit for "empathy," a problematic fact when engaging in dialog between scientists and contemplatives. This should not be too surprising, since the term "empathy" in European languages is itself only about a century old, and its meaning has not remained static over that time. It emerged as an aesthetic term (*Einfühlung*) describing a perceiver's felt involvement in an object of art, not in another person (*Einfühlung* could be literally translated as a 'feeling into'). Even back in 1948, the psychoanalyst Theodor Reik (1948:357) could write, "The word empathy sometimes meant one thing, sometimes another, until now it does not mean anything."

Grounding empathy in isomorphism that can be seen in the brain is an attempt to see empathy as a universal human process. If so, is it relevant to note that the term is relatively new in human history and that its current meanings in psychology and neuroscience are even newer? It may be possible that both the universal and the historically and culturally constructed nature of empathy can be acknowledged if we make a distinction between the specific processes that we are choosing to conceptualize or categorize as empathy (as Singer does above), and "empathy" as a term, which could be applied to any number of processes (as noted in the list of multiple definitions above). In other words, it may help if we always keep in mind the difference between "empathy" as a signifier that can be associated with a number of concepts, and the "empathies" (namely the processes) that are potentially signified by the term "empathy." If we fail to do so, we run into the problem of thinking that empathy is a kind of entity or process that is objectively out there in the world and that we are studying, and therefore that some definitions of empathy are right while others are wrong, because empathy has objective features given by nature, being itself a natural kind. This is to recognize our own conceptualizations of empathy as historically and culturally situated and constructed, which is doubtless the case, as has been shown above in examining the evolving nature of the way the term "empathy" is used. At the same time, the specific processes that we choose to group together and label "empathy," once so labeled, can be seen and studied for their regularity across human experience. There is no problem in investigating the possibility that such processes are universal, while recognizing that our conceptualization of them into a single category, called "empathy" is a contingent construct.

It is perhaps fitting that part of the very process of *Lojong* involves this recognition of one's own role in the creation of reality. Whereas a practitioner may begin by seeing "friends" and "enemies" as natural kinds that exist out in the world, the process of *Lojong* requires recognizing that these are categories created by oneself, creating a flexibility that is then employed to establish new categories, such as by seeing all sentient beings as one's mother in the practice of *mar shes* that we examined earlier.

The same process holds true for any other term we might employ in contemplative science, including "emotion." Without some attempt at a view that balances the historically and culturally constructed nature of our terminology with an ability to study universal features of human experience, we run into a number of problems. An example of this is in the study of compassion meditation, where two of the centers for this study, Emory and Stanford, have employed the term "self-compassion" in their meditation training protocols, despite the fact that these protocols are based on the Lojong tradition of Tibetan Buddhism, in which "self-compassion" is not only an absent term, but is arguably a self-contradiction.²⁸ There is no doubt, however, that the term "self-compassion" is powerful in an English-speaking context, and its usage has increased widely in recent years both in popular and academic accounts (Neff 2005, 2007, 2011). While scholars such as Neff see no problem in applying the term "compassion" to oneself, it is not a simple project to reconcile this with a traditional Tibetan Buddhist account of compassion, in which it seems intrinsically other-oriented. Discovering how to navigate this terrain, which is crucial for the emerging field of the interdisciplinary study of contemplative practices, will depend on whether we see emotions and other related terms as universal natural kinds, as historically and culturally situated constructs, or

²⁸ The reason this appears contradictory from certain Buddhist perspectives is twofold. Firstly, compassion is typically defined only as an other-oriented state, and secondly, it is taken for granted in some Buddhist models, including the lojong tradition, that we already wish happiness and relief of suffering for ourselves, making it unnecessary to cultivate self-compassion. In fact, having this wish too strongly for oneself while lacking it for others is considered "self-cherishing" (Tib. *rang gces*) which is in fact identified as something to be eliminated through spiritual practice. The Dalai Lama was asked about the suitability of using the term "self-compassion" at a conference at Emory University in 2010 and seemed to find the term problematic. Nevertheless, this term is widely used in secularized compassion training protocols based on the lojong tradition, including both CBCT and CCT (Negi, n.d.; CCARE, 2009).

through a third lens that enables us to recognize the importance of culture and social construction while maintaining an ability to study cross-culturally shared aspects of human experience and cognition.

Accounts of cognition that begin to break down the hard and fast barrier between an independent individual and their environment can therefore play a helpful role here. Just as our view of evolution has changed to an epigenetic account that values the complex interplay of genes and environment, grounded cognition and other developments in cognitive science (such as the work of Andy Clark, 2008, and the "radical embodiment" model proposed by Thompson and Varela, 2001) are moving cognition from the "black box" of a disembodied mind into the body, into social situations, and into environments. This too might help to address the problem of universality and difference. Regularities in environment and embodiment are important for regularities in emotion, but differences in environment and embodiment will therefore naturally result in differences in cognition and emotion as well. Moving away from a picture of a static, predetermined individual set out against nature, towards a view that sees individuals as interdependent with each other and with their environments, while adding a degree of complexity to the problems at hand, could also help us to achieve more satisfying solutions to them.

We can think of emotions in situations that do not involve interpersonal relationships—the fear that grips us if we suddenly fall or feel like we are falling a great distance, for example. Nevertheless, most instances of emotions and most of our emotion terms and concepts do involve interpersonal relationships. Although Ekman recognizes the importance of the social dimension of emotions, and sees the signaling of information to conspecifics as an important criterion for a basic emotion, his approach may downplay

248

the complexity of the relationship between emotions and social interaction. Because emotions are often so closely tied to social situations, they must be understood within their social context. By abstracting emotions from that context—in a sense sheering them from anything contextual and situated—the work of Ekman and others becomes limited in its ability to explain emotions in their full sense. White's (1994) work suggests that the study of emotions can be a fascinating area to explore the relationship between individual psychology and social and cultural contexts, and is an area that can challenge some of the dichotomies our thought generally falls into, such as mind/body, individual/society, and biology/culture.

The social nature of emotions may make the study of emotions a very fruitful field for examining the intersubjective nature of social experience, and this point may be of particular importance when dealing with phenomena of interest in contemplative science. If a situation arises involving two individuals, how one person feels is determined not just by "the social context" in some kind of fixed, determined way. Rather, that social context is constituted in part by how Person A feels that Person B feels, and vice versa, in an on-going dynamical process of mutual interaction that includes embodiment effects (such as mimicry) and theory of mind. Together, two individuals (you and I) decide what "we" feel; or we may decide that we do not feel the same—or, we may think that we do feel the same, when in fact we do not. Here we see an alliance between the simpler signaling of basic emotions, as presented by Ekman, and the phenomenological approach advocated by Zahavi, which we explored in the previous chapter; and we see that both stand in contrast to a more complex, interpretive, and constructed model. The latter are, in my view, far better able to address the complexity

and dynamic nature of such social interactions. Rather than speaking of discrete emotions that remain static and last for only a few seconds or at most a few minutes, as Ekman does, it may be fruitful to speak of emotional processes that occur along the dimension of time and that proceed along their trajectory dynamically and interdependently with the environment and with self-regulation.

The role of social interaction in the processing of emotions, as well as the role of cognitive processes in "making sense" of an event, and the effect this has on the emotional experience, suggests we need a dynamic interactive model to account for emotion in its widest sense. Thompson and Varela (2001) note that the principle of emergence through self-organization can be understood in two directions: both local-toglobal determination, or "upward causation," and global-to-local determination, or "downward causation." They note that "Global-to-local effects do not take the same form as local-to-global ones: they are typically manifest through changes in control parameters and boundary conditions, rather than through the interacting dynamical variables... Although usually called 'circular causality', this reciprocal (but not symmetrical) relationship between local and global levels seems better described as 'reciprocal causality."" (Thompson & Varela, 2001:419-421). This model of reciprocal causality seems better suited to accommodating the role that conscious processes and social stimuli (which can be unconscious) can have in emotional processing. Rather than emotion merely being the unconscious, automatic result of a perceptual stimulus, emotions in a social context can be understood as existing along a longer time frame that involves more complex cognitive processes that can influence and change the emotion.

Thompson and Varela not only examine upward and downward "reciprocal causality," but they argue for placing cognition back into the environment in its fullest sense. Thus, the environment becomes not only the situated context that provides the stimulus that triggers the emotion, but part of the dynamical system itself. They write:

The nervous system, the body and the environment are highly structured dynamical systems, coupled to each other on multiple levels. Because they are so thoroughly enmeshed – biologically, ecologically and socially – a better conception of brain, body and environment would be as mutually embedded systems rather than as internally and externally located with respect to one another. Neural, somatic and environmental elements are likely to interact to produce (via emergence as upward causation) global organism–environment processes, which in turn affect (via downward causation) their constituent elements. (Thompson & Varela, 2001:423-4)

The area of research on emotions has, like other areas, been subject to the same divides that have riddled much of contemporary western thought, including the nature/nurture debate. Part of the problem may be a conception of the individual's relationship to the environment that is too static and simple in nature. The enactive model presented by Thompson and Varela is one attempt to place the individual fully within the environment and to break down the "inside/outside" barrier that usually separates our understanding of individuals and environments, and that may be predicated upon an idea of the individual person as something unified, discrete, separate and "indivisible" (as found in the word "individual" itself). In fact, research in cognitive science suggests the individual is in some ways not "individual" at all; rather, cognitive processes appear to be much more fluid and dynamic than previously assumed, and emotions, which are so implicated in social relations, are a good area of study for examining this.

Conclusion

This chapter has examined research in psychology that is highly relevant to the study of *Lojong* within the context of contemplative science, focusing on recent developments in grounded cognition and emotions research. The main intention has been to show that developments in these areas are closely related, and that by bringing them together, we may make better progress towards the development of contemplative science. Furthermore, on the basis of the research and arguments presented in this chapter, we can return to some of the contributions to positive psychology that were anticipated in the first chapter.

By shifting attention from positive emotions to constructive ones, such as compassion, *Lojong* helps us move from a model of emotions that characterizes them based on immediate affect (positive vs. negative) to a model that characterizes them based on their ability to contribute to long-term happiness and well-being (constructive vs. destructive). Positive psychology has focused primarily on positive emotions (Fredrickson, 1998; Lyubomirsky et al., 2005), but it is clear that many emotions with negative affect can be adaptive and constructive, depending on the circumstance. Compassion itself, for example, can be seen as containing an element of negative affect, since it requires that an individual have an empathic response to another person's suffering; if the person in question felt positive affect upon seeing another's suffering, this would appear to preclude compassion. Similarly, tears are often seen as a sign of compassion, indicating that compassion can coexist with negative affect, despite being seen as a constructive emotion in the *Lojong* tradition. One of the main researchers on positive emotions, Barbara Fredrickson, has recently published a study showing that the presence of positive emotions in the absence of other measures of psychological and social well-being (such as a sense of meaning and direction in life, and so on) was correlated with increased expression of stress-related and proinflammatory gene expression (Fredrickson et al., 2013). This is a very welcome finding, as it suggests that earlier accounts of positive emotions were too simplistic, and that there are many other aspects to well-being and flourishing that need to accompany positive emotions in order for them to be truly healthy.

Secondly, *Lojong*'s emphasis on emotion generation and regulation intersects in interesting ways with debates within psychology on the nature of emotions, as we have seen, and in similar ways to how we explored the implications of *Lojong* for debates in phenomenology. *Lojong* also ties emotions directly to ethics and norms; as mentioned, *Lojong* is a teleological and normative tradition. This has interesting implications for positive psychology, which tends to shy away from normative statements, value judgments and the issue of morality and ethics. Lastly, *Lojong* shows us how a deeper understanding of contemplative practice that is broader than contemporary mindfulness-based interventions could be of immense value to positive psychology, because the sophistication of traditions like the *Lojong* tradition arguably far exceeds that of current positive psychology interventions, which are short-term and at present undertheorized (Mongrain & Anselmo-Matthews, 2012; Seligman et al., 2005).

253

Furthermore, contemplative practices like *Lojong* point to additional uses for applying grounded cognition theories, and the important implications such theories could have for the study of religion. Embodied theories of cognition and simulation theory clearly have a strong position in accounting for the complex and dynamic nature of emotions within their social context. An embodied, simulation theory of cognition would not have trouble accounting for significant cross-cultural commonalities across experiences that we term "emotions" or "emotional." At the same time, because simulation is based on modality-specific experience, it would be less likely to fall into an essentialization of emotions. White (1994) correctly points out that Ekman's understanding of emotion can fall into an essentializing trap. Just because we have terms for emotions, such as "anger" and "fear," and moods and mood disorders, such as "depression," this does not necessarily mean that there is some kind of concrete entity that we will be able to find that corresponds with our terms. A complex, dynamic theory, such as Thompson & Varela's (2001), would similarly not fall into such a trap, because it would understand all emotions to be part of complex processes that are embedded in larger networks.

We can therefore see that certain themes emerge when we examine various disciplines and their relevance to contemplative science, including the disciplines of phenomenology, positive psychology, grounded cognition or emotions theory. It is not necessary for those engaged in contemplative science to blindly take sides and adamantly hold fast to them throughout their careers: be it descriptive vs. interpretive phenomenology, or a basic emotions vs. a psychological constructivist model. Nevertheless, it is certainly advisable for such researchers to know the debates that exist in these fields, so that they can consciously adopt a certain position, recognizing its strengths and weaknesses. Without this awareness, researchers in contemplative science may mistakenly believe that there is only one tradition of phenomenology or one stance on emotions in psychology, just as they might mistakenly believe that there is only one Buddhist model of mind or model of compassion. Moreover, looking at these traditions alongside and in dialogue with contemplative traditions such as the *Lojong* tradition casts a different light on the debates taking place in psychology today. Certain angles will appear more conducive to both practitioners and researchers in the project of contemplative science than others. The more consciously and self-consciously we can take up stances with regard to these debates, the better.

CONCLUSION

This dissertation has sought to make a contribution to the fields of contemplative science, positive psychology, and religious studies by exploring the *Lojong* tradition and its methods for cultivating compassion. To this end, chapter one laid out the rationale for the dissertation and the choice of sources, and then focused on some of the ways that contemplative science and in particular attention to the *Lojong* tradition could complement the emerging field of positive psychology. There I identified several specific areas of potential contribution. I argued that contemplative science, and in particular attention to the *Lojong* interventions; provide a stronger basis for the field in ethics; provide a clearer accounting of religion and spirituality and their relationship to positive psychology; expand the field's understanding of "meaning in life"; refine thinking on emotions; bring in issues of embodiment currently missing in the field; and contribute to a more sophisticated understanding of consciousness and first-person experience.

The remaining chapters of the dissertation have attempted to draw out how some of these contributions could be made, although not all of them could be addressed in an equally thorough-going manner and a few have been left to be briefly mentioned in this conclusion, since they require further and more extensive treatment than the present work allows. Before addressing the above points, however, I felt it necessary to explore what is meant by "contemplative science" itself, since this too is a newly developing field. Therefore in chapter two I explored a few key issues in contemplative science, focusing on reductionism, religious experience, the issue of mindfulness, and the contrasting approaches of two figures who have argued for the bridging of science and religious studies approaches, namely Alan Wallace and Edward Slingerland.

Following that, the remaining chapters sought to address some of the areas of contribution I outlined in the introduction. In chapter three, I endeavored to show that the *Lojong* tradition contains a rich theoretical and practical approach to the cultivation of compassion. The tradition differentiates among different types of compassion, and contains specific practices for cultivating them. Moreover, it does so by identifying specific ingredients or components that are necessary for cultivating universal, unbiased compassion. When contrasted to current positive psychology interventions, the sophistication of both the theory and practice of *Lojong* is impressive. Attention to such richness would facilitate the development of more powerful positive psychology interventions in the future. The increasingly widespread use of secular protocols based on *Lojong*, such as CBCT and CCT, suggests that the religious origins of such traditions need not inhibit this process.

Another contribution I suggested was attention to consciousness and first-person experience, an area of obvious importance in positive psychology, yet one that is strangely undertheorized in the field. This was examined most closely in chapter four, which focused on phenomenology. Here I argued that the *Lojong* tradition contains an implicit phenomenology, and drew this out from source texts. I then examined various strains in the western phenomenological tradition to see how they might align with this implicit phenomenology. The aim of this is to lay out groundwork for a contemplative phenomenology that would be of use to both contemplative science and positive psychology. Chapter five then tackled the issues of embodiment and emotions. There I argued for attention to grounded cognition, which I believe has great potential for contemplative science and, indeed, religious studies in general. I also explored theories of emotions and brought them in dialogue with the *Lojong* tradition. Positive psychology remains focused on positive and negative emotions, whereas an approach more similar to *Lojong* that focused on constructive and destructive mental states would likely be more amenable and applicable to the study of happiness and flourishing.

A few of my suggested contributions were not covered in the body chapters of this dissertation. Specifically the topics of "meaning in life" and ethics were treated only lightly and in passing. In one section, I did explore the Dalai Lama's concept of "secular ethics" and how this can provide an important non-metaphysically charged basis for both positive psychology and contemplative science. However, these are both areas that can be explored in greater detail. In the remainder of this conclusion, I offer a few preliminary thoughts on these topics, since in many ways they bring together the threads of this dissertation and point towards future research.

Compassion as Ethical Self-Cultivation

In the *Lojong* tradition, the cultivation of compassion is not simply the cultivation of one mental state among others, rather it is the reshaping of one's entire ethical subjectivity and way of relating to oneself, others, and the world. We have seen in chapter three that the cultivation of unbiased, altruistic compassion as envisioned in *Lojong* depends on the development of a foundation that includes many other ingredients. Furthermore, we saw in chapter four that ultimately the cultivation of compassion should even change the way others are presented to us phenomenally. In the implicit phenomenology of the *Lojong* tradition, we saw that this process of coming to perceive self and others differently should in turn have an effect on the way we feel towards them and therefore interact with them. From this we can see that compassion in *Lojong* is fundamentally tied to ethics.

This is likely the reason that the Dalai Lama has suggested in his books *Ethics for the New Millennium* and *Beyond Religion* that compassion can serve as a foundation for a "secular ethics," by which he means not an anti-religious ethics, but rather an ethics based on fundamental human values irrespective of a person's religious beliefs or lack thereof (Gyatso, 2001, 2011). Here one is 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), but instead 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. As Tsomo (2012) notes:

Buddhist contemplative practices are designed to transform the mind. Ethical conduct is the foundation for contemplative practice; conversely, mental purification is the foundation for ethical conduct (Dalai Lama 1995).

We have also seen that this ethical orientation pertains to the way that *Lojong* approaches mental states. While emotions in western context are often divided according to positive and negative affect, in *Lojong* mental states are differentiated according to whether they are beneficial or harmful to oneself and others. This approach is again

clearly centered on the question of one's own and others' well-being; it is ethical, normative, and soteriological.

Understanding compassion as ethical self-cultivation recognizes that the cultivation of compassion is a process of self-work and self-transformation. The cultivation of a kind of subjectivity that views other sentient beings as precious and that contains within it deep insight into their suffering may be more akin to the cultivation of a kind of aesthetic sensibility, that is, the cultivation of an ability to appreciate. This is not merely a coldly rational understanding, but a deep transformation of one's cognitive and affective processes that changes the way one perceives oneself, others, and the world. In chapter four we explored this through a phenomenological approach, and in chapter five we saw that grounded cognition may also provide important insights with regard to this. In future, these two approaches should be brought more closely together. Theories of grounded cognition help us to appreciate that sensory perception has an effect on our bodies, our cognition and our affect. This suggests that the division between body (sensory perception) and mind (higher cognition) is not as clearly divided as previously thought. Aesthetic presentation, including the phenomenal appearance of others before us, is then not simply about meaning and interpretation, but also about the actual *impact* that sensation has on the body/mind. Furthermore, since grounded cognition theories situate knowledge in the body, in perception and in action, ethics cannot be limited to an abstract set of rules or calculations, but must be deeply embodied. Ethics too must involve perceptual cognition and hence the training of subjectivity to attend to the situation of "sharing a world" with others. While Buddhist ethical theories can be compared with western ones, the above may provide a few reasons why as of yet many have found it

260

unsatisfactory to collapse Buddhist ethics into western categories of deontological, virtue, consequentialist, and so on (Harvey, 2000; Keown, 2005).²⁹

Therefore, the cultivation of subjectivity, or what Yves Klein calls "the refinement of sensibility," (Klein, 1974) may prove a productive way of understanding both aesthetics and ethics, and provides a link between the two of them. Ethics in *Lojong* may be more about the cultivation of a particular type of sensibility—not just beauty, or taste—but one that is oriented towards the suffering of others and the alleviation of that suffering. Thus, aesthetics may provide an avenue for understanding Buddhist ethical self-cultivation, namely the cultivation of compassion, and both phenomenology and grounded cognition can contribute to this line of research.

Looked at from this way, the cultivation of an ethical person is the cultivation of a person whose subjectivity is structured in such a way that they become incapable of intending the harm of others and spontaneously intend the benefit of others. Interestingly, in his work *Others in Mind*, Rochat (2009a) notes his appreciation for the phenomenological tradition but his dissatisfaction that most phenomenologists still seem preoccupied with the primacy of the individual self, which only then later comes into contact with others. There is, however, one phenomenologist who places the encounter with the other as primary, namely Emmanuel Levinas. Interestingly, this shift results in a

²⁹ Of the various forms of western ethical theory, virtue ethics appears to come closest to the ethics espoused in the *Lojong* tradition and in contemporary presentations such as those by the Dalai Lama. "Virtue ethics" however is itself a broad category, and Aristotelian virtue ethics has many dissimilarities to what we might roughly call "*Lojong* ethics." For example, in her excellent work on virtue ethics, Annas (1993) notes that for Aristotle, *philia* (love, friendship) was to be limited and did not extend outward to "the farthest Mysian." Annas notes that only later in Greek philosophy did impartiality enter as an important and ultimately essential concern for ethics. Even in post-Aristotelian Greek philosophy, however, we do not find the emphasis on feelings (love, compassion) in the way presented in *Lojong*.

strong attention to both ethics and compassion for Levinas, something that is not seen in his predecessors in phenomenology.

For Levinas, as Edelglass writes, "Ethics is compassion" (Edelglass 2004:6). Levinas called ethics "first philosophy," and in prioritizing ethics over ontology and metaphysics, Levinas's approach bears some resemblance to that of the Dalai Lama explored earlier. For both thinkers, the question of suffering is first and foremost a practical question, and it is also an ethical one; in fact, it is *the* ethical one. For both the Dalai Lama and for Levinas, the larger project of philosophy begins with ethics because it begins with the problem of suffering, a universal fundamental of the human condition. Edelglass (2004:16) notes: "For Levinas, the suffering of the self is the origin of philosophy, and philosophy then moves towards the truth of the suffering of the other." This strongly resembles what we explored in chapter three, namely the movement from renunciation—called self-compassion in contemporary secular *Lojong*-based protocols to unbiased compassion for others.

Compassion at the Core *Redux*: Towards a Relational Theory of Meaning

Interest in contemplative practices is not entirely new, but recent developments in psychology, neuroscience, and psychoneuroimmunology have significantly bolstered our resources for understanding contemplative practices and their transformative potential. These are due not merely to technological advances, such as the development of neuroimaging technologies; they are also due to significant conceptual reorientations. I argued in the first chapter—and have returned to it periodically—that several of these reorientations suggest that we have "compassion at the core," and that this reflects a fundamental shift in our view of human nature. Increasing evidence suggests that we are not individuals who are essentially selfish and only come together by rationally deciding that we will benefit more from social interaction, but rather that social connection is essential to us on a fundamental level. These reorientations include the recognition that as humans we may share more in common than previously thought with non-human animals when it comes to the foundations of morality such as fairness and the underpinnings of empathy (Brosnan & de Waal, 2003; de Waal, 2009); the discovery of mirror neurons (Cook et al., 2014) and the fact that empathy involves isomorphic activation between our brains and those of others (Singer et al., 2006); and a shift towards viewing the emergence of self-consciousness as inherently social and interpersonal in nature, meaning that the self is itself co-constructed with others (Rochat, 2009a). They also include the recognition that the adult brain can change in function and structure (neuroplasticity), and continues to grow new neurons even into old age (neurogenesis), conceptual shifts that have fundamentally altered our way of viewing ourselves and that have also made possible the birth of contemplative science (Schaffer, 2012).

This is the context in which contemplative science is now developing. Interest in contemplative practices themselves is not new, of course. Foucault (1997) called such practices "technologies of the self," and he also addressed them under the theme "self-care" or "care of the self" (*souci de soi*). Such practices involve the reorientation of the subject's relations to him or herself, to others, to the universe, and to critical existential realities such as death. The process of self-transformation involves changing from a type of person who is afraid of death, who views death, for example, as a terrifying unknown and as the end of the self, and who therefore tries to suppress the idea of death while at

the same time being dominated by a fear of it, to a type of person who is comfortable with death, who is ever-mindful of death and his or her mortality, and who can face his or her own (and others') death with equanimity. It is these reorientations that mark a shift from one type of personhood to another. To use Foucault's language, over time, through the technologies of the self, the subject subjectivizes himself as a new subject (Foucault, 1997). Despite differences across religious and spiritual traditions, therefore, there are likely common psychological processes involved that are tapped into by these "technologies of the self." It is these reorientations that mark a shift from one type of personhood to another, and it is the task of contemplative science to attempt to elucidate the mechanisms involved.

The changed relationship of the subject to death, as noted above, is certainly a feature of *Lojong* practice (Pabongka, 2006), as is the changed relationship of the subject to him- or herself, but they do not comprise the key feature of *Lojong*. The key reorientation is rather the reorientation of the subject's relation to others. The subject is to become one whose relations to others is characterized by particular emotional states, principally equanimity (*btang-snyom*), a love that delights in others (*yid 'ong gi byams pa*), and compassion (*snying rje*). These emotions, and specifically compassion, in turn effect a reorientation of the subject's relation to him- or herself, whereby the subject becomes one who is seeking buddhahood in order to save all sentient beings from suffering—essentially, if the transformation is fully effected, a kind of saint.

This perspective shows that just as we must attend to the contents of contemplative practice, we must also attend to the reshaping of subjectivity itself. In chapter two, I argued that attention in contemplative science should not be restricted to

264

mindfulness as defined by contemporary mindfulness-based interventions (MBIs), but should rather be expanded to include a wider range of contents. Such a wider range is clearly employed by the *Lojong* tradition, and also by contemporary *Lojong*-based practices. If we only focus on mental contents, however, we miss a great deal. As we saw in our discussion of religious experience, religious experience involves content, but it also involves the structures of consciousness that shape subjective experience—what I am calling subjectivity. As we saw in chapter four, *Lojong* practice involves both: it involves employing mindfulness to examine a wider range of content than that currently employed in contemporary MBI's, but it ultimately also involves the reshaping of the structures of subjective experience, such that phenomena (including other people) actually appear differently. In his work on Levinas and Śāntideva, Edelglass makes this point very well:

Indeed, compassion, as Levinas argues, is the 'supreme ethical principle' and the 'nexus of subjectivity.' The compassionate response to the suffering other constitutes the emptying of the egocentric self. Levinas himself never attempted to construct an ethics based on his description of compassionate subjectivity that would transform the egocentric conduct that dominates the ontological realm of history and experience, though he maintained that such an ethics would be possible... Santideva provides mental and physical practices to transform the egoistic self. These technologies of the self are employed to effect a transformation from a subject who causes her own suffering and the suffering of others, indeed, is insensible to the suffering of others, to a subject who cherishes others, whose primary engagement with the world is characterized by lovingkindness and compassion. (Edelglass, 2004:2)

If the new conceptual shifts taking place in a variety of fields are pointing to something legitimate—that in a non-trivial way we have compassion at our core—then it stands to reason that attending to that compassion and expanding it could lead to greater physical and mental health. This may account for the findings regarding the health and psychological benefits of compassion cultivation protocols, such as CBCT, CCT and other methods (Klimecki et al., 2012; Pace et al., 2008, 2010, 2013; Reddy et al., 2013).

It furthermore has implications for another area of importance to positive psychology: meaning in life. Up until now, researchers have discovered that meaning in life is a core component of flourishing, life satisfaction and *eudaimonic* happiness (Keyes, 2014; Keyes & Simoes, 2012). Yet while the presence of self-reported meaning in life is positively correlated with measures of well-being, the search for meaning in life is not, and is correlated with negative affect, depression, and neuroticism (Steger et al., 2006). The measures used in positive psychology for meaning in life and the search for meaning, however, remain predominantly focused on individual aspirations, purposes, goals and cognitive understandings of life. In Steger et al.'s (2006) scale on presence and search for meaning in life, the questions are "I understand my life's meaning," "My life has a clear sense of purpose," and so on; it is notable that the most common words in the scale are "T" and "my."

This highly individualistic cognitive and goal-directed orientation flies in the face of the material presented in this dissertation. Social relationships are not a subset of possible meanings in life, they are the context in which meaning itself takes place. This should be recognized explicitly in measures of meaning. As Rochat notes, "Children are in need of social exchanges, not only to survive physically, but also to develop their intellectual and affective potentials, to develop the intersubjective sense of who they are as persons. Once again, this point is almost embarrassingly trivial, yet it does not seem to have sunk very deep into the minds of many theorists of the self" (Rochat 2009a:36). Rochat argues that "the self as an object to itself is *co-constructed* in interaction with others" (Rochat 2009a:37). Elsewhere he writes, "If there is a self, it is *social* in nature" (2009a:13):

The main idea is that the origins of self-consciousness are inherently social, that there is no such thing as a "core" or an "individual self." My hope is to debunk the concept of the individual self that would presumably exist and emerge in itself as a conscious object or entity. I propose instead that what develops and is unique to human ontogeny is a self that is *co-constructed in relation to others*. (Rochat 2009a:3)

The social origins of selfhood has implications for self-knowledge, Rochat argues. Self-knowledge "is to be located neither within the individual nor in the mind of others. Rather, it is to be located *in-between*, in other words, at their *junction*. Self-knowledge is at the *interface* of the individual and communicating others" (Rochat, 2009a:40). This pertains also to meaning in several ways. When a person points to an object with a pointing gesture, "the meaning of the pointing is shared, not privately owned." (Rochat, 2009a:40). Rochat notes that etymologically in both Latin (*conscientia*) and Greek (*suneidesis*), consciousness means "knowing with," i.e. shared knowledge. With Descartes, consciousness came to become private (*cogito ergo sum* instead of *cogitamus* *ergo sum*). Rochat therefore proposes the term "co-consciousness" to refer to the shared meanings and shared knowledge that coexists in multiple minds and "transcends the individual" (Rochat, 2009a:54). "The mental objects of co-consciousness are at the interface between an individual and other individuals with whom he or she is sharing the experience of being in the world" (Rochat, 2009a:54). In co-consciousness, "I do not think about what I know through my own devices, but what I know with *others in mind*" (Rochat, 2009a:54); it refers to "intersubjective negotiation or the negotiation of shared experience" and "is the source of the universe of knowledge that guides our behaviors" (Rochat, 2009a:55).

The topic of "meaning in life" as examined by positive psychology definitely falls within the category of co-consciousness and must therefore acknowledge the social nature of selfhood. If my life has meaning, it has meaning first and foremost in the eyes of others, such as my parents or caregivers. Furthermore, that meaning is neither purposive nor a higher cognitive process of "understanding" the meaning of my life; rather it is first and foremost *felt* in the care I receive from others, through which I come to sense that my life has meaning *to others*. Only secondarily, and co-constructed within that social context, does my life come to have meaning for myself. The meaning of my life, therefore, even in my own eyes, cannot be separated from this social matrix. By ignoring it, and by concentrating on the cognitive, goal-directed, purpose-directed, and individualistic side of meaning, we are limiting ourselves to an evolutionarily and developmentally later, and therefore potentially more superficial—in the sense of its relationship to our deep well-being and happiness, the topic of positive psychology—layer of meaning.

The socially and co-conscious construction of meaning can be seen clearly in its absence as well. It appears that when individuals feel a lack of compassion and care and worth in the estimation of others, their life loses meaning in their own eyes as well. Nothing exemplifies this more than in the suicides of those who are lonely or at risk of social isolation and rejection. It should come as no surprise that those who consider or attempt suicide exhibit both a lack of meaning in life and a lack of social support and social connection with others (Poudel-Tandukar, 2011; Ozawa-de Silva, 2010). Nor should it surprise us that groups at high risk of ostracization, social rejection and social isolation exhibit far higher rates of attempted suicide; those who self-identify as lesbian, gay or bisexual have rates of attempted suicide two to four times those of individuals who do not, while those who self-identify as transgender have rates of attempted suicide that are 70 to 200 times higher (Haas et al., 2010).

Ultimately, this question can only be answered empirically. If what I am arguing here has merit, then new measurements of meaning in life that include a relational dimension should show higher correlations and be more predictive of other measures of well-being, happiness, flourishing and potentially even physical health. If so, this would support the theoretical orientation that arises out of the research examined in the present work, namely that of a relational theory of meaning. Whereas the theoretical orientation implicit in the approaches of Steger (2006) and others comes from the primacy of the individual as an individual, a relational theory of meaning takes its starting point from the interdependent co-construction of self and other as elaborated on by Rochat, Bowbly's

work on attachment (1983), and emerging science of compassion, including the present dissertation's examination of the *Lojong* tradition.³⁰

In brief, this orientation would suggest the following. Meaning in life is fundamentally social knowledge and therefore a product of co-consciousness. When we are the objects of the care and compassion of others, we feel safe and secure; and in that safety, as a result of our evolution, we feel happiness and well-being, and we do not question our meaning in life because we have it implicitly in our warm relations with others. On the other hand, when we do not feel the care and compassion of others, we feel alone and threatened; our greatest fear, that of social rejection and isolation-what Rochat (2009a) calls "the mother of all fears"—rises to the surface; and it is then that we experience an absence of meaning in life, and search for ways to fill that absence. In other words, meaning in life comes not from a cognitive understanding of the way the world works or in having a purpose or goal that one can fulfill. Both evolutionarily and developmentally, these processes are late and therefore, in my estimation, not at the deepest core of our being. Social connection, however, and the ability to give and receive care, are evolutionarily relatively ancient compared to these higher cognitive functions, and emerge developmentally much earlier. Therefore the deepest meaning we will experience in life, as it relates to health, happiness and flourishing, must also exist on this level of giving and receiving care.

Note that this suggests that meaning itself is interdependent. A child loved by her parents has meaning in life not because of an understanding or purpose that she herself has independent of them, but rather experiences meaning in life as a function of her

³⁰ A full elaboration of this point would take significant work and will form the basis of a future article.

experience of the meaning she has in their eyes. As Rochat (2009a) says, we live through the eyes of others. Similarly, this theory would predict that when one extends genuine compassion to another human being, the very treatment of that person as a person whose life is meaningful to you, would have an effect on that person such that their meaning in life may increase. Although meaning in life is most fundamentally shared and social knowledge, it is best approached through the lens of co-consciousness; nevertheless, we can attempt to fulfill meaning in life through individual consciousness. It is here that we attempt to fill our lives with meaning in ways that are not connected with others: such as through goals and aspirations that may not apparently involve others. This theory would predict, however, that such attempts would not be as successful as attempts to address the question of meaning in life through co-consciousness, since they are tackling the question of meaning on a more superficial level with regard to the social nature of our selfhood. A relational theory of meaning would be a theory that recognizes the importance of care and compassion for us as human beings, and would be an interesting development in the study of meaning in life, which itself has been a crucial area of study in positive psychology.

I have endeavored to show in this dissertation that the implications for the study of compassion as presented in the *Lojong* tradition are significant and wide-ranging. Much of the work in this dissertation remains at a preliminary stage, in part due to the fact that it brings together many fields that are themselves still very new. Many lines of research, however, both conceptual and empirical, have been laid out, and it remains to begin to explore each of these step by step. Two such promising lines of inquiry were explored in this conclusion: the first involves relating this work more closely to the question of ethics; the second involves relating it to the area of research in positive psychology around "meaning in life." Since the questions at hand pertain to many areas and many disciplines, there is no doubt that more many more lines of research could emerge over time, expanding and deepening the fields of contemplative science and positive psychology.

BIBLIOGRAPHY

Allport, G.W. (1954). The Nature of Prejudice. Cambridge, MA: Addison-Wesley.

- Annas, J. (1993). The Morality of Happiness. New York: Oxford University Press.
- Anuruddha,Bodhi, B. (2000). A Comprehensive Manual of Abhidhamma: The Abhidhammattha sangaha of Acariya Anuruddha. Seattle: Buddhist Publication Society.
- Asad, T. (1991). "Afterword: From the history of colonial anthropology to the anthropology of Western hegemony." In Stocking, G. W. (Ed.) *Colonial Situations: Essays on the contextualization of ethnographic knowledge*. Madison, Wis.: University of Wisconsin Press, 314-24.
- Asanga. (2001). *Abhidharmasamuccaya: The Compendium of the Higher Teaching*. Trans., Walpola Rahula, Sara Boin-Webb. Asian Humanities Press.
- Baddeley, A. (1992). "Working memory." Science, 255(5044), 556–559.
- Baer, R. A. (2003). "Mindfulness training as a clinical intervention: A conceptual and empirical review." *Clinical psychology: Science and practice* 10(2), 125-143.
- Barsalou, L. W. (1999). "Perceptions of Perceptual Symbols." *Behavioral and Brain Sciences* 22(4):637-660.
- Barsalou, L. W., Niedenthal, P. M., Barbey, A. K., & Ruppert, J. A. (2003). "Social Embodiment." In *Psychology of Learning and Motivation* (Vol. Volume 43, pp. 43–92). Academic Press. Retrieved from http://www.sciencedirect.com/science/article/pii/S0079742103010119
- Barsalou, L. W., Barbey, A. K., Simmons, W. K., & Santos, A. (2005). "Embodiment in religious knowledge." *Journal of Cognition and Culture* 5(1), 14-57.

- Barsalou, L. W. (2005). "Situated conceptualization." In Cohen, H. and Lefebvre, C., Eds., *Handbook of Categorization in Cognitive Science*. Boston: Elsevier. 619-650.
- Barsalou, L. W. (2008). "Grounded Cognition." Annual Review of Psychology 59:617-645.
- Barsalou, L. (2010). "Grounded Cognition: Past, Present, and Future." *Topics in Cognitive Science*, 2(4), 716–716–724.
- Berzin, A. (2006). "Mind and Mental Factors: The Fifty-one Types of Subsidiary Awareness." Electronic document. Available at: http://www.berzinarchives.com/web/en/archives/sutra/level4_deepening_understandi ng_path/mind_mental_factors/mind_mental_factors_51.html. Accessed on October 20, 2014.
- Blackman, L. (2008). The Body. The Key Concepts. New York: Oxford University Press.
- Blogowska, J., & Saroglou, V. (2011). "Religious fundamentalism and limited prosociality as a function of the target." *Journal for the Scientific Study of Religion* 50(1), 44-60.
- Bolier, L., Haverman, M., Westerhof, G. J., Riper, H., Smit, F., & Bohlmeijer, E. (2013).
 "Positive Psychology Interventions: A Meta-analysis of Randomized Controlled Studies." *BMC Public Health*, 13(1), 119.
- Bowlby, J. (1983). Attachment: Attachment and Loss. New York: Basic Books.
- Boyer, P. (2001). *Religion Explained: The Evolutionary Origins of Religious Thought*. New York: Basic Books.
- Brewer, M. B. (1999). "The Psychology of Prejudice: In Group Love and Out Group Hate?" *Journal of Social Issues* 55(3), 429-444.
- Britton, W. B., Brown, A. C., Kaplan, C. T., Goldman, R. E., DeLuca, M., Rojiani, R., & Frank, T. (2013). "Contemplative Science: An Insider Prospectus." <u>New Directions</u>

for Teaching and Learning, 2013(134), 13-29.

- Brosnan, S. F., & De Waal, F. B. (2003). "Monkeys Reject Unequal Pay." *Nature*, 425(6955), 297-299.
- Buber, M. (1958). I and Thou. New York: Scribner.
- Carman, T. (1999). "The Body in Husserl and Merleau-Ponty." *Philosophical Topics* 27(2):205-226.
- CCARE (Center for Compassion and Altruism Research and Education) (2009).
 Compassion Cultivation Training Program: An Eight-Week Course on Cultivating
 Compassionate Heart and Mind: Instructor's Manual. Developed by Geshe Thupten
 Jinpa.
- Chiesa, A. (2012). "The Difficulty of Defining Mindfulness: Current Thought and Critical Issues." *Mindfulness*, 1–14.
- Coakley, S. (Ed.). (2000). *Religion and the Body*. Cambridge: Cambridge University Press.
- Cho, F., & Squier, R. K. (2008a). " 'He Blinded Me With Science': Science Chauvinism in the Study of Religion." *Journal of the American Academy of Religion* 76(2):420-448.
- Cho, F., & Squier, R. K. (2008b). "Reductionism: Be Afraid, Be Very Afraid." *Journal of the American Academy of Religion* 76(2):412-417. doi:10.1093/jaarel/lfn005
- Churchland, P. (1988). *Matter and Consciousness: A Contemporary Introduction to the Philosophy of Mind*. Cambridge, Mass: MIT Press.
- Cook, R., Bird, G., Catmur, C., Press, C., & Heyes, C. (2014). "Mirror neurons: from origin to function." *Behavioral and Brain Sciences*, 37(02), 177-192.
- Crick, F. (1995). *Astonishing Hypothesis: The Scientific Search for the Soul*. New York: Simon and Schuster.

- Crocker, J., Thompson, L. L., McGraw, K. M., & Ingerman, C. (1987). "Downward Comparison, Prejudice, and Evaluations of Others: Effects of Self-esteem and Threat." *Journal of Personality and Social Psychology*, 52(5), 907.
- Csaszar, I. (2012). *The Effect of Loving Kindness Meditation and Student Teachers Stress and Empathy.* Ph.D. dissertation. Louisiana State University.
- Csikszentmihalyi, M., & Csikzentmihaly, M. (1991). *Flow: The Psychology of Optimal Experience*. New York: Harper Perennial.
- Damasio, A. R. (1999). *The Feeling of What Happens: Body and Emotion in the Making of Consciousness*. New York: Harcourt Brace.
- Damasio, A. R. (2000). Descartes' Error. New York: Quill.
- David, S. A., Boniwell, I., & Ayers, A. C. (Eds.). (2014). Oxford Handbook of Happiness. New York: Oxford University Press.
- Davidson, R., Dunne, J., Eccles, J. S., Engle, A., Greenberg, M., Jennings, P. & Vago, D. (2012). "Contemplative practices and mental training: Prospects for American education." *Child Development Perspectives*, 6(2), 146-153.
- Davis, D. M., & Hayes, J. A. (2011). "What are the Benefits of Mindfulness? A Practice Review of Psychotherapy-Related Research." *Psychotherapy*, 48(2), 198–208.
- Dawkins, R. (2008). The God Delusion. Boston: Mariner.
- De Certeau, Michel (1984). *The Practice of Everyday Life*. Transl. Steven Rendall. Berkeley : University of California Press.
- De Waal, F. (2009). *The Age of Empathy: Nature's Lessons for a Kinder Society*. New York: Harmony.
- Dehir, M. (2014). "Introduction to Relationships and Happiness." In David, S. A., Boniwell, I., & Ayers, A. C. (Eds.). Oxford Handbook of Happiness. New York: Oxford University Press, 817-820.

- Denma Locho Rinpoche, & Lati Rinpoche (1983). *Meditative States in Tibetan Buddhism.* London: Wisdom Publications.
- Dennett, D. (1991). Consciousness Explained. Boston: Little Brown and Co.
- Dijksterhuis, A., & Nordgren, L. F. (2006). "A theory of unconscious thought." *Perspectives on Psychological Science*, 1(2), 95-109.
- Dzogchen Khenpo Chöga (2004). Drops of Nectar. Khenpo Kunpal's Commentary on Shantideva's Entering the Conduct of Bodhisattvas, vol. 1. Transl., Andreas Kretschmar. Unpublished manuscript.
- Fiala, B., & Nichols, S. (2009). "Confabulation, Confidence, and Introspection." Behavioral and Brain Sciences, 32(02), 144-145. doi:10.1017/S0140525X09000624
- Desbordes, G., Negi, L. T., Pace, T. W. W., Wallace, B. A., Raison, C. L., & Schwartz,
 E. L. (2012). "Effects of Mindful-Attention and Compassion Meditation Training on Amygdala Response to Emotional Stimuli in an Ordinary, Non-Meditative State." *Frontiers in Human Neuroscience*, 6. doi:10.3389/fnhum.2012.00292
- Desjarlais, R. and Throop, J. (2011). "Phenomenological Approaches in Anthropology." *Annual Review of Anthropology*, vol. 40:87–102.
- Dreyfus, G. B. (2003). *The Sound ofTtwo Hands Clapping: The Education of a Tibetan Buddhist Monk.* Berkeley: University of California Press.
- Dreyfus, G., & Thompson, E. (2007). "Indian Theories of Mind." In Zelazo, P. D., Moscovitch, M., & Thompson, E. (Eds.). *The Cambridge Handbook of Consciousness*. Cambridge: Cambridge University Press.
- Dunne, J. D. (2004). *Foundations of Dharmakirti's Philosophy*. Boston: Wisdom Publications Inc.
- Dunne, J.D. (2015). "Buddhist Styles of Mindfulness: A Heuristic Approach." In Ostafin,B.D., Meier, B.P., and Robinson, M.D. (Eds.). *Handbook of Mindfulness and Self-*

Regulation. New York: Springer Verlag.

Dunne, J. D. (forthcoming). "What is Inner Science?"

- Dutton, J. E., Workman, K. M., & Hardin, A. E. (2014). "Compassion at Work." *Annual Review of Organizational Psychology and Organizational Behavior* 1:277–304.
- Edelglass, W. D. (2004). *The Self and the Suffering Other: Levinas and Santideva On the Ethics of Compassion*. PhD dissertation, Emory University.
- Ekman, P., & Friesen, W. V. (1971). "Constants Across Cultures in the Face and Emotion." *Journal of Personality and Social Psychology*, 17(2), 124.
- Ekman, P., Friesen, W. V., & Ellsworth, P. (1972). Emotion in the Human Face: Guidelines for Research and an Integration of Findings. Oxford, England: Pergamon Press.
- Ekman, P. (1992). "An Argument for Basic Emotions." *Cognition & Emotion*, 6, 169–200.
- Ekman, P. (1994). "Strong Evidence for Universals in Facial Expressions: a Reply to Russell's Mistaken Critique." *Psychological Bulletin* 115(2):268-287.
- Ekman, P. and the Dalai Lama (2008). *Emotional Awareness. Overcoming the Obstacles to Psychological Balance and Compassion*. New York: Times Books.
- Ekman, P. and Keltner, D. (2014). "Darwin's Claim of Universals in Facial Expression Not Challenged." Electronic document. Available at <u>http://www.paulekman.com/uncategorized/darwins-claim-universals-facial-</u> <u>expression-challenged/</u> (Retrieved February 16, 2015).
- Emmons, R. A., & McCullough, M. E. (Eds.). (2004). The Psychology of Gratitude. Oxford University Press.
- Engle, A. (2009). The Inner Science of Buddhist Practice : Vasubandhu's Summary of the Five Heaps with Commentary by Sthiramati. Ithaca, NY: Snow Lion.

- Fernandez-Ríos, L. and Cornes, J.M. (2009). "A Critical Review of the History and Current Status of Positive Psychology." *Anuario de Psicología Clínica y de la Salud*, 5, 7-13.
- Fernandez-Ríos, L. and Novo, M. (2012). "Positive Psychology: 'Zeigeist' (or spirit of the times) or ignorance (or disinformation) of history?" *International Journal of Clinical and Health Psychology*, 12(2), 333-344.
- Fish, S. (2010). "Are There Secular Reasons?" New York Times, February 22.
- Flavell, J. H. (2004). "Theory-of-mind development: Retrospect and prospect." *Merrill-Palmer Quarterly*, 50(3), 274-290.
- Fodor, J.A. (1983). *The Modularity of Mind: An Essay on Faculty Psychology*. Cambridge, Mass.: MIT Press.
- Foucault, M. (1995). *Discipline and Punish: The Birth of the Prison*.New York: Vintage Books.
- Foucault, M. (1997). Ethics: Subjectivity and Truth. New York: New Press
- Fox, K. C., Nijeboer, S., Dixon, M. L., Floman, J. L., Ellamil, M., Rumak, S. P., & Christoff, K. (2014). "Is Meditation Associated With altered Brain Structure? A Systematic Review and Meta-Analysis of Morphometric Neuroimaging in Meditation Practitioners." *Neuroscience & Biobehavioral Reviews* 43, 48-73.
- Fredrickson, B. L. (1998). "What Good Are Positive Emotions?" *Review of General Psychology : Journal of Division 1, of the American Psychological Association*, 2(3), 300–319. doi:10.1037/1089-2680.2.3.300
- Fredrickson, B. L. (2013). Love 2.0: Finding Happiness and Health in Moments of Connection. New York: Hudson Street Press.
- Fredrickson, B. L., Grewen, K. M., Coffey, K. A., Algoe, S. B., Firestine, A. M., Arevalo, J. M., ... & Cole, S. W. (2013). "A Functional Genomic Perspective on
Human Well-Being." *Proceedings of the National Academy of Sciences*, 110(33), 13684-13689.

- Gable, S. L., & Haidt, J. (2005). "What (and why) is positive psychology?" *Review of General Psychology* 9(2), 103.
- Galante, J., Galante, I., Bekkers, M. J., & Gallacher, J. (2014). "Effect of Kindness-Based Meditation on Health and Well-Being: A Systematic Review and Meta-Analysis." *Journal of Consulting and Clinical Psychology* 82(6), 1101.
- Gallese, V. & Goldman, A. (1998). "Mirror Neurons and the Simulation Theory of Mind-Reading." *Trends in Cognitive Sciences*, vol. 2 (12):493-501.
- Gampopa (1998). *The Jewel Ornament of Liberation: The Wish-Fulfilling Gem of the Noble Teachings*. Ithaca, NY: Snow Lion.
- Gazzaniga, M. S. (2005). "Forty-Five Years of Split-Brain Research and Still Going Strong." *Nat Rev Neurosci*, 6(8), 653-659. doi:10.1038/nrn1723
- Gendron, M., Lindquist, K. A., Barsalou, L., & Barrett, L. F. (2012). "Emotion words shape emotion percepts." *Emotion*, 12(2), 314.
- Gendron, M., Roberson, D., van der Vyver, J. M., & Barrett, L. F. (2014). "Perceptions of emotion from facial expressions are not culturally universal: Evidence from a remote culture." *Emotion*, 14(2), 251.
- Gethin, R. (2011). "On Some Definitions of Mindfulness," *Contemporary Buddhism* 12(1):263-279.
- Gethin, R. (2015). "Buddhist Conceptualizations of Mindfulness." In Brown, K. W., Creswell, J. D., & Ryan, R. M., Eds., *Handbook of Mindfulness: Theory, Research, and Practice*. New York: Guilford Publications.
- Gilbert, P. (2005). Compassion: Conceptualisations, Research and Use in Psychotherapy (New edition.). Routledge.

- Gintis, H. (Ed.). (2005). Moral Sentiments and Material Interests: The Foundations of Cooperation in Economic Life (Vol. 6). Cambridge, MA: MIT press.
- Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). "Compassion: an evolutionary analysis and empirical review." *Psychological Bulletin* 136(3), 351.
- Goodwin, B. (2001). *How the Leopard Changed Its Spots: The Evolution of Complexity*. Princeton: Princeton Unversity Press.
- Goldstein, J. (2013). *Mindfulness: A practical guide to awakening*. Boulder, Colo: Sounds True.
- Goleman, D. (2003). *Destructive Emotions: A Scientific Dialogue with the Dalai Lama*. New York: Bantam Doubleday Dell.
- Gould, S. J. (1997) "Nonoverlapping Magisteria," Natural History 106 (March): 16-22.
- Goyal, M., Singh, S., Sibinga, E. M., Gould, N. F., Rowland-Seymour, A., Sharma, R., & Haythornthwaite, J. A. (2014). "Meditation Programs for Psychological Stress and Well-Being: A Systematic Review and Meta-Analysis." *JAMA Internal Medicine* 174(3), 357-368.
- Graham, J., & Haidt, J. (2010). "Beyond beliefs: Religions bind individuals into moral communities." *Personality and Social Psychology Review* 14(1), 140-150.
- Greitemeyer, T., Osswald, S., & Brauer, M. (2010). "Playing prosocial video games increases empathy and decreases schadenfreude." *Emotion* 10(6), 796.
- Grimshaw, A. and Ravetz, A. (2005). *Visualizing Anthropology*. Portland, OR: Intellect Books.
- Gross, J. J., & Barrett, L. F. (2011). "Emotion generation and emotion regulation: One or two depends on your point of view." *Emotion Review* 3(1), 8-16.
- Gyatso, T. (H. H. the Dalai Lama) and Hopkins, J. (1985) *The Kālachakra Tantra : Rite of Initiation for the Stage of Generation*. London: Wisdom Publications.

- Gyatso, T. (H. H. the Dalai Lama). (1997). *Healing anger: The power of patience from a Buddhist perspective*. Ithaca, NY: Snow Lion Publications.
- Gyatso, T. (H. H. the Dalai Lama). (2002). *How to Practice: The Way to a Meaningful Life*. New York: Atria Books.
- Gyatso, T. (H. H. the Dalai Lama). (2003). Stages of Meditation. Ithica, N.Y.: Snow Lion Publications.
- Gyatso, T. (The Dalai Lama) (2006). *The Universe in a Single Atom: The Convergence* of0020Science and Spirituality. New York: Three Rivers Press.
- Gyatso, T. (H. H. the Dalai Lama) (2011). *Beyond Religion: Ethics for a Whole World*. Boston: Houghton Mifflin Harcourt.
- Haas, A. P., Eliason, M., Mays, V. M., Mathy, R. M., Cochran, S. D., D'Augelli, A. R., & Clayton, P. J. (2010). "Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: review and recommendations." *Journal of Homosexuality*, 58(1):10-51.
- Haidt, J., & Graham, J. (2007). "When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize." *Social Justice Research* 20(1), 98-116.
- Halifax, J. (2011). "The Precious Necessity of Compassion." *Journal of Pain and Symptom Management*, 41, 146-153.
- Harvey, P. (2000). An introduction to Buddhist ethics: foundations, values and issues. Cambridge: Cambridge University Press.
- Harvey, P. (2012). An Introduction to Buddhism Teachings, History and Practices.Cambridge: Cambridge University Press.
- Hastrup, K. (1995). *A Passage to Anthropology: Between Experience and Theory*. New York: Routledge.

Hawking, S. (1998). A Brief History of Time. New York: Bantam.

- Heidegger, M. (2008). Being and Time. New York: Harper Perennial, reprint edition.
- Hopkins, J. (1983). Meditation on Emptiness. London: Wisdom Publications.
- Huntington, J.C. (2003). *The Circle of Bliss: Buddhist Meditational Art.* Columbus: Columbus Museum of Art.
- Hurley, W. (n.d.). COMPASS: Compassion and Analytic Selective-focus Skills for the Classroom, Helping Educators Enhance a Positive School Climate. Unpublished manuscript.
- Husserl, E. (1970). The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy. Evanston: Northwestern University Press.
- Izard, C. E. (1971). The Face of Emotion. New York: Appleton Century Crofts.
- James, W. (1936). *The Varieties of Religious Experience: A Study in Human Nature* New York: Modern Library.
- Jazaieri, H., Jinpa, G. T., McGonigal, K., Rosenberg, E. L., Finkelstein, J., Simon-Thomas, E., & Goldin, P. R. (2013). "Enhancing Compassion: A Randomized Controlled Trial of a Compassion Cultivation Training Program." *Journal of Happiness Studies*, 14(4), 1113-1126.
- Jenkins, S.L. (1999). *The Circle of Compassion: An Interpretive Study of Karuna in Indian Buddhist Literature*. PhD dissertation, Harvard University.
- Jensen, C. G., Vangkilde, S., Frokjaer, V., & Hasselbalch, S. G. (2012). "Mindfulness Training Affects Attention--or is it Attentional Effort?" *Journal of Experimental Psychology. General*, 141(1), 106–123. doi:10.1037/a0024931
- Jha, Amism P, Krompinger, J., & Baime, M. J. (2007). "Mindfulness Training Modifies Subsystems of Attention." *Cognitive, Affective & Behavioral Neuroscience*, 7(2),

- Jha, Amishi P., Stanley, E. A., Kiyonaga, A., Wong, L., & Gelfand, L. (2010)."Examining the Protective Effects of Mindfulness Training on Working Memory Capacity and Affective Experience." *Emotion*, 10(1), 54.
- Jinpa, T. (2004). Theg pa chen po blo sbyong brgya rtsa. Institute of Tibetan Classics.
- Jinpa, T. (2006). *Mind training: The Great Collection*. Wisdom Publications.
- Johnson, M. (2008). *The Meaning of the Body: Aesthetics of Human Understanding*. University Of Chicago Press.
- Kabat-Zinn, J. (1990). Full Catastrophe Living. Worcester: University of Massachusetts Medical Center.
- Kabat-Zinn, J. (2005). Coming to Our Senses: Healing Ourselves and the World Through Mindfulness. New York: Hyperion.
- Kapstein, M. T. (2000). *The Tibetan assimilation of Buddhism: conversion, contestation, and memory*. New York: Oxford University Press.
- Kent, B. (2001). "Augustine's Ethics." In Stump, E., & Kretzmann, N. (Eds.). *The Cambridge Companion to Augustine*. Cambridge: Cambridge University Press, 205-233.
- Keyes, C. L. (2014). "Happiness, flourishing, and life satisfaction." *The Wiley Blackwell Encyclopedia of Health, Illness, Behavior, and Society.* Cockerham, W.C., Dingwall, R. & Quah, S.R., Eds. Chichester: Wiley Blackwell.
- Keyes, C. L., & Simoes, E. J. (2012). "To flourish or not: Positive mental health and allcause mortality." *American Journal of Public Health* 102(11), 2164-2172.
- Keown, D. (2005). Buddhist Ethics. London: Blackwell Publishing.

Kierkegaard, S. (1983). Fear and Trembling/Repetition. Edna H. Hong and Howard V.

Hong, transl. Princeton: Princeton University Press.

- Kirmayer, L. J. (2002). "Psychopharmacology in a Globalizing World: The Use of Antidepressants in Japan." *Transcultural Psychiatry*, *39*(3), 295–322.
- Klein, Y. (1974). *Yves Klein, 1928-1962. Selected Writings*. London: Tate Gallery Publications.

Kleinman, A. (1999) *Tanner Lectures*. Salt Lake City: University of Utah Press

- Klimecki, O. M., Leiberg, S., Lamm, C., & Singer, T. (2012). "Functional Neural Plasticity and Associated Changes in Positive Affect After Compassion Training." *Cerebral Cortex*, bhs142.
- Kok, B. E., Waugh, C. E., & Fredrickson, B. L. (2013). "Meditation and Health: The Search For Mechanisms of Action." *Social and Personality Psychology Compass* 7(1), 27-39.
- Kosslyn, S. M. (2005). "Reflective Thinking and Mental Imagery: A Perspective on the Development of Posttraumatic Stress Disorder." *Development and Psychopathology*, *17*(03), 851–863.
- Laidlaw, J. (2007). "Social anthropology, religion, and the cognitive sciences. A well-disposed social anthropologist's problems with the "cognitive science of religion." In Whithouse, H. and Laidlaw, J., Eds., *Religion, Anthropology and Cognitive Science*. Durham, N.C.: Carolina Academic Press.
- Lamrimpa, G. (1992). *Calming the Mind. Tibetan Buddhist Teachings on the Cultivation* of Meditative Quiescence. Ithaca, N.Y.: Snow Lion Publications.
- Lane, R., & Nadel, L. (2000). Cognitive Neuroscience of Emotion. New York: Oxford University Press.
- Lawson & McCauley, R. (2002). *Bringing Ritual to Mind*. Cambridge: Press Syndicate of the University of Cambridge

LeDoux, J. (1998). The Emotional Brain. New York: Simon & Schuster.

- Leu, J., Mesquita, B., Ellsworth, P. C., ZhiYong, Z., Huijuan, Y., Buchtel, E., Masuda, T. (2010). "Situational Differences in Dialectical Emotions: Boundary Conditions in a Cultural Comparison of North Americans and East Asians." *Cognition and Emotion*, 24(3), 419–435.
- Leu, J., Wang, J., & Koo, K. (2011). "Are Positive Emotions Just as 'Positive' Across Cultures?" *Emotion-APA*, 11(4), 994.
- Levinas, E. (1979). *Totality and infinity: An essay on exteriority* (Vol. 1). Springer Science & Business Media.
- Levinas, E., & Nemo, P. (1985). Ethics and infinity. Duquesne University Press.
- Lindbeck, G. (1984). *The Nature of Doctrine : Religion and Theology in a Post Liberal Age* (1st ed.). Philadelphia: Westminster Press.
- Lodro, G. (1990). *Walking Through Walls: A Presentation of Tibetan Meditation*. Ithaca: Snow Lion.
- Loizzo, J. (2012). Sustainable Happiness: The Mind Science of Well-being, Altruism and Inspiration. New York: Routledge.
- Lopez, K.A., & Willis, D.G. (2004). "Descriptive Versus Interpretive Phenomenology: Their Contributions to Nursing Knowledge," *Qualitative Health Research* 14(5):726-735.
- Lopez, D.S. & Rockefeller, S.C. (1987). *The Christ and the Bodhisattva*. Albany, NY: State University of New York.
- Lopez, S. J., & Snyder, C. R. (2009). Oxford Handbook of Positive Psychology. Oxford University Press.
- Lozano-Gotor, J.M. (2013). "Divine Action." In Runehov, A.L.C. and Oviedo, L. (Eds.) *Encyclopedia of Sciences and Religions*. London: Springer. Pp. 637-639.

- Lueke, A., & Gibson, B. (2014). "Mindfulness Meditation Reduces Implicit Age and Race Bias The Role of Reduced Automaticity of Responding." *Social Psychological and Personality Science*. Published online prior to print publication. doi: 10.1177/1948550614559651.
- Lutz, A., Brefczynski-Lewis, J., Johnstone, T., & Davidson, R. J. (2008). "Regulation of the Neural Circuitry of Emotion by Compassion Meditation: Effects of Meditative Expertise." *PloS one* 3(3), e1897.
- Lutz, A., Greischar, L. L., Rawlings, N. B., Ricard, M., & Davidson, R. J. (2004). "Longterm meditators self-induce high-amplitude gamma synchrony during mental practice." *Proceedings of the National Academy of Sciences of the United States of America*, 101(46), 16369-16373.
- Lutz, A. & Thompson, E. (2003). "Neurophenomenology," *Journal of Consciousness Studies* 10(9-10):31-52.
- Lyubomirsky, S., King, L., & Diener, E. (2005). "The Benefits of Frequent Positive Affect: Does Happiness Lead to Success?" *Psychological Bulletin*, *131*(6), 803.
- Mackenzie, M. J., Carlson, L. E., Paskevich, D. M., Ekkekakis, P., Wurz, A. J., Wytsma, K., & Culos-Reed, S. N. (2014). "Associations Between Attention, Affect and Cardiac Activity in a Single Yoga Session for Female Cancer Survivors: An Enactive Neurophenomenology-Based Approach." *Consciousness and Cognition*, 27, 129-146.
- Makransky, J. (2007). *Awakening Through Love: Unveiling Your Deepest Goodness*. Boston, Mass: Wisdom Publications.
- Makransky, J. (2013). "Innate Compassion Training (ICT)—Six Impediments to Cultivating Compassion." Unpublished document. Presented at the Mind and Life Summer Research Institute at the Garrison Institute, June 20.
- Martiny-Huenger, T., Gollwitzer, P. M., & Oettingen, G. (2014). "Selective Attention to In-and Out-group Members Systematically Influences Intergroup Bias." *Social*

Psychological and Personality Science, 5(8), 936-943.

- Mascaro, J. S., Rilling, J. K., Negi, L. T., & Raison, C. L. (2013). "Compassion Meditation Enhances Empathic Accuracy and Related Neural Activity." *Social Cognitive and Affective Neuroscience*, 8(1), 48–55. doi:10.1093/scan/nss095
- Maslow, A.H. (1943). "A Theory of Human Motivation." *Psychological Review* 50 (4) 370–96.
- Maslow, A.H. (1968). Toward a Psychology of Being. New York: Van Nostrand.
- McCutcheon, R. (2006). "Its a Lie. Theres No Truth in It! Its a Sin!: On the Limits of the Humanistic Study of Religion and the Costs of Saving Others from Themselves." *Journal of the American Academy of Religion*, 74(3), 720-720-750. doi:10.1093/jaarel/lfj090
- McEwan K, Gilbert P, Dandeneau S, Lipka S, Maratos F, et al. (2014) "Facial Expressions Depicting Compassionate and Critical Emotions: The Development and Validation of a New Emotional Face Stimulus Set." PLoS ONE 9(2): e88783. doi:10.1371/journal.pone.0088783
- Meaney, M. J. (2001). "Maternal Care, Gene Expression, and The Transmission of Individual Differences in Stress Reactivity Across Generations." *Annual Review of Neuroscience* 24(1), 1161-1192.
- Meiklejohn, J., Phillips, C., Freedman, M. L., Griffin, M. L., Biegel, G., Roach, A., & Saltzman, A. (2012). "Integrating mindfulness training into K-12 education: Fostering the resilience of teachers and students." *Mindfulness* 3(4), 291-307.
- Merleau-Ponty, M. (1962). *Phenomenology of Perception*. New York: Humanities Press, 1962.
- Merleau-Ponty, M. (1964). *The Primacy of Perception and Other Essays on Phenomenological Psychology, the Philosophy of Art, History and Politics.* Evanston: Northwestern University Press.

- Moerman, D. E. (2002). *Meaning, Medicine, and the "Placebo Effect."* Cambridge: Cambridge University Press.
- Moerman, D. E., & Jonas, W. B. (2002). "Deconstructing the Placebo Effect and Finding the Meaning Response." *Annals of Internal Medicine* 136(6), 471-476.
- Mongrain, M., & Anselmo-Matthews, T. (2012). "Do Positive sychology Exercises Work? A Replication of Seligman et al.(2005)." *Journal of Clinical Psychology*, 68(4).
- Moran, D. (2000). Introduction to Phenomenology. New York: Routledge.
- Moscovitch, M. & Thompson, E. (eds.), *Cambridge Handbook of Consciousness*. Cambridge: Cambridge University Press.
- Nagel, T. (2012). *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature is Almost Certainly False*. Oxford: Oxford University Press.
- Neff, K. (2005). "Self-compassion, Achievement Goals, and Coping with Academic Failure. Self and Identity", 4(3), 263-287.
- Neff, K. (2007). "Self-Compassion and Adaptive Psychological Functioning." *Journal of Research in Personality.*, 41(1), 139.
- Neff, K. D. (2011). "Self-Compassion, Self-Esteem, and Well-Being." Social and Personality Psychology Compass, 5(1), 1-12.
- Negi, L.T. (n.d.) Cognitively-Based Compassion Training: A Manual. Unpublished manuscript.
- Newberg, A., & d'Aquili, E. G. (2008). *Why God Won't Go Away: Brain Science and the Biology of Belief.* New York: Ballantine Books.
- Newberg, A. (2010). Principles of Neurotheology. Burlington, VT: Ashgate Publishing.
- Niedenthal, P. M., Barsalou, L. W., Winkielman, P., Krauth-Gruber, S., & Ric, F. (2005).

"Embodiment in attitudes, social perception, and emotion." *Personality and Social Psychology Review* 9(3), 184-211.

- Nisbett, R. E., & Wilson, T. D. (1977). "Telling More Than We Can Know: Verbal Reports on Mental Processes." *Psychological Review*, *84*(3), 231.
- Obeyesekere, G, (1985) "Depression and Buddhism and the Work of Culture in Sri Lanka." In Kleinman, A.& Good, B., Culture and Depression: Studies in the Anthropology and Cross-Cultural Psychiatry of Affect and Disorder, pp.134-152, Berkeley: University of California Press.
- Ozawa-de Silva, B. (2014a). "Secular Ethics, Education and Embodied Cognitive Logics," *Journal of Contemplative Inquiry*, vol. 1, no. 1.
- Ozawa-de Silva, B., & Dodson-Lavelle, B. (2011). "An Education of Heart and Mind: Practical and Theoretical Issues in Teaching Cognitive-Based Compassion Training to Children." *Practical Matters*, 1(4), 1–28.
- Ozawa-de Silva, B. R., Dodson-Lavelle, B., Raison, C. L., & Negi, L. T. (2012).
 "Compassion and Ethics: Scientific and Practical Approaches to the Cultivation of Compassion as a Foundation for Ethical Subjectivity and Well-Being." *Journal of Healthcare, Science and the Humanities.*
- Ozawa-ed Silva, B. and Negi, L.T. (2013). "Cognitively-Based Compassion Training: Protocol and Key Concepts," in Tania Singer and Mathias Bolz, eds., *Compassion: Bridging Theory and Practice*. Max Planck Gesellschaft.
- Ozawa-de Silva, C. (2006). *Psychotherapy and Religion in Japan : the Japanese Introspection Practice of Naikan*. London: Routledge.
- Ozawa-de Silva, C. (2010). "Shared death: self, sociality and internet group suicide in Japan," *Transcultural Psychiatry* 47(3):392-418.
- Ozawa-de Silva, C., & Ozawa-de Silva, B. (2010). "Secularizing Religious Practices: A Study of Subjectivity and Existential Transformation in Naikan Therapy." *Journal*

for the Scientific Study of Religion, 49(1), 147–161.

- Ozawa De Silva, C., & Ozawa-De Silva, B. R. (2011). "Mind/Body Theory and Practice in Tibetan Medicine and Buddhism." *Body & Society*, *17*(1), 95–119. doi:10.1177/1357034X10383883
- Pabongka Rinpoche (2006). Liberation in the Palm of Your Hand: A Concise Discourse on the Path to Enlightenment. (M. Richards, Trans., T. Rinpoche, Ed.) (New revised edition). Boston: Wisdom Publications.
- Pace, T.W.W., Negi L.T., Adame, D.D., Cole, S.P., Sivilli, T.I., Brown, T.D., Issa, M.J.,
 & Raison, C.L. (2008). "Effect of Compassion Meditation on Neuroendocrine, Innate Immune and Behavioral Responses to Psychosocial Stress," *Psychoneuroendocrinology* 34(1), 87-98.
- Pace, T. (2010). "Innate Immune, Neuroendocrine and Behavioral Responses to Psychosocial Stress do not Predict Subsequent Compassion Meditation Practice time." *Psychoneuroendocrinology* 35(2), 310–310–315.
- Pace, T. W. W., Negi, L. T., Dodson-Lavelle, B., Ozawa-de Silva, B., Reddy, S. D., Cole, S. P., Raison, C. L. (2013). "Engagement with Cognitively-Based Compassion Training is Associated With Reduced Salivary C-Reactive Protein from Before to After Training in Foster Care Program Adolescents." *Psychoneuroendocrinology*, 38(2), 294–299.
- Paltrul Rinpoche & Dilgo Khyentse Rinpoche (1993). The Heart Treasure of the Enlightened Ones: The Practice of View, Meditation, and Action: A Discourse Virtuous in the Beginning, Middle, and End (1st ed.). Boston: Shambhala Publications.
- Patrul Rinpoche (1998). *The Words of My Perfect Teacher, Revised Edition* (Rev Sub.). Boston: Shambhala Publications.
- Peterson, C. and Seligman, M. E. P. (2004). *Character Strengths and Virtues: A Handbook and Classification*. Oxford: Oxford University Press.

- Pettit, J. W. (1999). *Mipham's Beacon of Certainty: Illuminating the View of Dzogchen*. Boston: Wisdom Publications.
- Paulson, S. (2006). "Buddha on the Brain." Salon, November 27. Available online at: <u>http://www.salon.com/2006/11/27/wallace_11/</u>. Accessed February 26, 2015.
- Pinker, S. (1984). The Language Instinct. New York: Morrow and Co.
- Poudel-Tandukar, K., Nanri, A., Mizoue, T., Matsushita, Y., Takahashi, Y., Noda, M., ... & Tsugane, S. (2011). "Social support and suicide in Japanese men and women: The Japan Public Health Center (JPHC)-based prospective study." *Journal of Psychiatric Research*, 45(12), 1545-1550.
- Preussner, J. C., Champagne, F., Meaney, M. J., & Dagher, A. (2004). "Dopamine release in response to a psychological stress in humans and its relationship to ealy life maternal care: a positron emission tomography study using [11C] raclopride." *Journal of Neuroscience* 24: 2825-2831.
- Proudfoot, W. (1985). Religious Experience. Berkeley: University of California Press.
- Proudfoot, W. (2010). "Attribution and Building Blocks: Comment on Ann Taves's Religious Experience Reconsidered," *Religion* 40:308-310.
- Pruzinsky, T. (n.d.). "Specific Methods for Cultivating Compassion and Wisdom: Comparative Analysis of Sixteen Texts in the Tibetan Buddhist Mind Training Tradition." Unpublished manuscript.
- Putz, O. (2009). "Moral apes, Human Uniqueness, and the Image of God." Zygon 44(3), 613-624.
- Reddy, S. D., Negi, L. T., Dodson-Lavelle, B., Ozawa-de Silva, B., Pace, T. W., Cole, S. P., Craighead, L. W. (2013). "Cognitive-Based Compassion Training: A promising Prevention Strategy for At-Risk Adolescents." *Journal of Child and Family Studies*, 22(2), 219–230.

- Reik, T. (1948). *Listening With the Third Ear. The Inner Experience of a Psychoanalyst.* New York: Farrar, Straus.
- Rinchen, S. and Sonam, R. (1997). *Atisha's Lamp for the Path to Enlightenment*. Ithaca, NY: Snow Lion.
- Rochat, P. (2009a). *Others in Mind: Social Origins of Self-Consciousness*. New York: Cambridge University Press.
- Rochat, P. (2009b). "Commentary: mutual recognition as a foundation of sociality and social comfort." In T. Striano and V. Reid (Eds.), *Social Cognition. Development, Neuroscience, and Autism.* Malden, Mass.: Blackwell, 2009.
- Rochat, P. and Passos-Ferreira, C. (2008). "From Imitation to Reciprocation and Mutual Recognition." In J. Pineda (Ed.), *Mirror Neuron Systems. The Role of Mirroring Processes in Social Cognition.* San Diego, CA: Humana Press.
- Rogers, C. (1961). On Becoming a Person. Boston: Houghton Mifflin.
- Rousseau, J.J. (2012). *The Basic Political Writings*. Transl: Donald A. Cress. Indianapolis: Hackett.
- Russell, J. A. (1994). "Is There Universal Recognition of Emotion from Facial Expressions? A Review of the Cross-Cultural Studies." *Psychological Bulletin* 115(1), 102-141.
- Russell, J. A. (1995). "Facial Expressions of Emotion: What Lies Beyond Minimal Universality?" *Psychological Bulletin* 118(3): 379-391.
- Russell, J. A. (2003). "Core Affect and the Psychological Construction of Emotion." *Psychological Review* 110(1):145-172.
- Ryan, T. (2013). A Mindful Nation: How a Simple Practice Can Help Us Reduce Stress, Improve Performance, and Recapture the American Spirit. Carlsbad, Calif.: Hay House.

- Sāntideva. (1997). *The Way of the Bodhisattva: A Translation of the Bodhicharyāvatāra*. Boston: Shambhala.
- Saphire-Bernstein, S. and Taylor, S.E. (2014). "Close Relationships and Happiness." In David, S. A., Boniwell, I., & Ayers, A. C. (Eds.). Oxford Handbook of Happiness. New York: Oxford University Press, 821-833.
- Scarry, E. (1985). *The Body in Pain: The Making and Unmaking of the World*. New York: Oxford University Press.
- Schacter, D. (1997) *Memory Distortion: How Minds, Brains, and Societies Reconstruct the Past.* Cambridge, Mass: Harvard University Press.
- Shaffer, J. (2012). "Neuroplasticity and positive psychology in clinical practice: A review for combined benefits." *Psychology* 3(12), 1110-1115.
- Schubert, C. (2014). "Psychoneuroimmunologie des Lebenslaufs: Einfluss von Stress in der Kindheit auf Immunfunktionsstörung und entzündliche Erkrankung im weiteren Leben" [Psychoneuroimmunology of the Life Span: Impact of Childhood Stress on Immune Dysregulation and Inflammatory Disease in Later Life.]. *Psychotherapie, Psychosomatik, Medizinische Psychologie* 64(05): 171-180.
- Seligman, M. E. (1999). "The President's Address." American Psychologist, 54(8), 559-562.
- Seligman, M. E. and Csikszentmihalyi, M. (2000). "Positive Psychology: An Introduction." American Psychologist, 55(1), 5-14.
- Seligman, M. E., Steen, T. A., Park, N., & Peterson, C. (2005). "Positive Psychology Progress: Empirical Validation of Interventions." *American Psychologist*, 60(5), 410-421.
- Seligman, M. E. (2012). Flourish: A Visionary New Understanding of Happiness and Well-being. New York; Toronto: Atria Books.

- Sequeira, S. (2014). "Foreword to Advances in Meditation Research: Neuroscience and Clinical Applications." *Annals of the New York Academy of Sciences*, 1307(1), v-vi.
- Shklovsky, Victor. (1965). "Art as Technique." In Russian Formalist Criticism: Four Essays, ed. and trans. by Lee T. Lemon and Marion J. Reis, 3-24. Lincoln: University of Nebraska Press.
- Siderits, M., Tillemans, T., and Chakrabarti, A., eds. (2011). *Apoha: Buddhist Nominalism and Human Cognition*. New York: Columbia University Press.
- Siegel, D. J. (2007). The Mindful Brain: Reflection and Attunement in the Cultivation of Well-Being. New York: W. W. Norton & Company.
- Singer, T., Seymour, B., O'Doherty, J. P., Stephan, K. E., Dolan, R. J., & Frith, C. D. (2006). "Empathic Neural Responses are Modulated by the Perceived Fairness of Others," *Nature*, 439(7075), 466–469.
- Singer, T., and Bolz, M. (2013). *Compassion: Bridging Theory and Practice*. Max Planck Gesellschaft. Ebook. Available online at www.compassion-training.org
- Singer, T., & Lamm, C. (2009). "The Social Neuroscience of Empathy." Annals of the New York Academy of Sciences, 1156(1), 81-96.
- Slingerland, E. (2008a). *What Science Offers the Humanities: Integrating Body and Culture*. Cambridge University Press.
- Slingerland, E. (2008b). "Reply to Cho and Squier." Journal of the American Academy of Religion, 76(2), 418-419.
- Slingerland, E. (2008c). "Who's Afraid of Reductionism? The Study of Religion in the Age of Cognitive Science." *Journal of the American Academy of Religion*, 76(2), 375-411.
- Smith, J. Z. (1982). *Imagining religion: from Babylon to Jonestown*. Chicago: University of Chicago Press.

- Spiro, M. E. (1986). "Cultural Relativism and the Future of Anthropology." *Cultural Anthropology*, 1(3), 259-286.
- Suchocki, M. (1982). *God, Christ, Church: A Practical Guide to Process Theology*. New York: Crossroad.
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). "The Meaning in Life Questionnaire: Assessing the Presence of and Search for Meaning in Life." *Journal* of Counseling Psychology, 53(1), 80.
- Steger, M. F., Kashdan, T. B., Sullivan, B. A., & Lorentz, D. (2008). "Understanding the Search for Meaning in Life: Personality, Cognitive Style, and the Dynamic Between Seeking and Experiencing Meaning." *Journal of Personality*, 76(2), 199-228.
- Taves, A. (2009). *Religious Experience Reconsidered: A Building-Block Approach to the Study of Religion and Other Special Things.* Princeton: Princeton University Press.
- Thanissaro, Bhikkhu (2011) *Karaniya Metta Sutta*. Electronic document available at: http://www.accesstoinsight.org/tipitaka/kn/snp/snp.1.08.than.html. Accessed November 22, 2001.
- Thompson, E. and Varela, F. (2001). "Radical Embodiment: Neural Dynamics and Consciousness." *Trends in Cognitive Sciences* 5(10):418-425.
- Tillich, P. (1973). Systematic Theology, vol. 1. Chicago: University of Chicago Press.
- Tillich, P. (1975). Systematic Theology, vol. 2. Chicago: University of Chicago Press.
- Tillich, P. (1976). Systematic Theology, vol. 3. Chicago: University of Chicago Press.
- Tsomo, K.L. (2012) "Compassion, Ethics, and Neuroscience: Neuroethics Through Buddhist Eyes." *Science and Engineering Ethics*, 18(3):529-537.
- Tsongkhapa. (2004). The Great Treatise On The Stages Of The Path To Enlightenment Vol 3. (L. C. T. Committee, Trans., J. W. C. Cutler, Ed.). Ithaca, N.Y.: Snow Lion.

Van Den Bouwhuijsen, H., Claes, T., & Derde, W. (1995). "Recovering 'Culture'." *Cultural Dynamics* 7(2), 163-186.

Van Fraassen, B. (2002). The Empirical Stance. New Haven, CT: Yale University Press.

- Varela, F. (1996) "Neurphenomenology: a Methodological Remedy for the Hard Problem" *Journal of Consciousness Studies, 3, no. 4, 330-349.*
- Varela, F., Thompson, E., Rosch, E. (1991). *The Embodied Mind: Cognitive Science and Human Experience* Cambridge: MIT Press
- Vasubandhu. (1990). *Abhidharmakosabhasyam*. Transl. L. de la Vallee Poussin, Leo M. Pruden. Asian Humanities Press.
- Visala, A. (2011). *Naturalism, Theism, and the Cognitive Study of Religion: Religion Explained?* Farnham, Surrey: Ashgate Publishing, Ltd..
- Wade, N. G., Hoyt, W. T., Kidwell, J. E., & Worthington Jr, E. L. (2014). "Efficacy of Psychotherapeutic Interventions to Promote Forgiveness: A Meta-Analysis." *Journal* of Consulting and Clinical Psychology, 82(1), 154.
- Wallace, B. A. (2007). Contemplative Science: Where Buddhism and Neuroscience Converge. New York: Columbia University Press.
- Wallace, B. A. (2008). Embracing Mind : The Common Ground of Science and Spirituality. Boston: Shambhala.
- Wilson, R. A. (2004). "The trouble with truth: Anthropology's Epistemological Hypochondria." *Anthropology Today*, 20(5), 14-17.
- Wirzba, N. (1995). "From maieutics to metanoia: Levinas's understanding of the philosophical task." *Man and World*, 28(2), 129-144.

Wittgenstein, L. (1953). Philosophical Investigations. New York: Macmillan.

Woodworth, RJ (2014) "A Replication and Conceptual Evaluation of Commonly Used

Positive Psychology Interventions." PhD thesis, University of Tasmania.

Worthington Jr, E. L. (Ed.). (2005). Handbook of Forgiveness. New York: Routledge.

- Zahavi, D. (2008). Subjectivity and Selfhood: Investigating the First-Person Perspective. Cambridge, Mass.: MIT Press.
- Zajonc, A. (2004). *The New Physics and Cosmology: Dialogues with the Dalai Lama*. Oxford: Oxford University Press.
- Zelazo, P.D., Moscovitch, M. & Thompson, E. (eds.), *Cambridge Handbook of Consciousness*. Cambridge: Cambridge University Press.
- Zopa Rinpoche, L. (2006). *Essential Buddhist Prayers: An FPMT Prayer Book*. Foundation for the Preservation of the Mahayana Tradition.