

Monasteries of the Future

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Advisor: Robert Thurman, Ph.D.

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Abstract

For millennia, monasteries have been at the forefront of training virtues such as compassion, transcendence, service, gratitude, forgiveness, and grit, as well as foundational psychological capacities such as self-regulation, sustained, voluntary attention, emotional intelligence, and meta-cognitive awareness. Monasteries of the Future are modern institutions, both secular and religious, designed to provide the requisite financial, social, intellectual, and instructional support necessary to train a new generation of contemplative adepts. Forming a network of centers which collaborate and compete, Monasteries of the Future will establish and uphold the highest standards in the contemplative field. By partnering with modern science, most notably positive psychology, neuroscience, and medicine, Monasteries of the Future will drive innovation in the field of contemplative science, and in so doing, promote human flourishing and ameliorate suffering. The rationale for Monasteries of the Future is built on the science of deliberate practice, emerging research on meditation and neuroplasticity, and ancient contemplative claims. On the front lines of revealing what inner skills are trainable, how to train them, and how trainable they are, Monasteries of the Future will help to answer these pressing and complex questions, that in a world of seven billion people, have become questions of survival.

Dedication

For all the contemplative adepts committed to lives of service.

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Table of Contents

Introduction	7
A Glimpse	7
Overview	8
Personal Background	11
Change is Possible	14
The Ascendancy of Neuroplasticity	14
Expert Performance and Deliberate Practice	15
Meditation Works	18
Growth in Science	19
Overview of Benefits of Meditation	19
Issues with the Research	20
Deeper Developmental Possibilities	21
Short vs. Long-Term Training	21
Attention	23
Compassion	27
Enlightenment	29
The Modern Contemplative Field	32
Dilution of Standards	32
Deep Training	35
Overview of Monasteries of the Future	39
Vision	40
Production of Elite Monks	41
Diverse Populations	43
More Logistics: A Road Map with Blanks	48
Contemplative Practice Adapts to Various Cultures	48
Why Call Them “Monasteries”?	49
Gaining Power	50
Financing Monasteries of the Future	52
Collaborate and Compete: Structure of a Network	54
Contemplative Science Drives Innovation	54

Partnership with Positive Psychology	56
Balancing Rigor and Innovation	58
Accountability	59
Further Benefits of Monasteries of the Future	60
Teachers and Guides	60
Monks as Symbols of a Happiness Beyond Conditions	60
Gaining the Ear of Kings	61
Not a Panacea	63
Conclusion	64
References	66

Introduction

A Glimpse

It is 4:30 AM. In silence, ten people in brown shirts gather in a dim room for meditation and chanting. Two hours later, as dawn breaks, an hour-long exercise period begins. The individuals scatter, one dashes into the woods for a run, another lifts weights, still another cracks open the ice on the frozen pond for a morning swim. At 7:30 AM sharp a silent breakfast begins. It is a simple meal of rice, beans, and vegetables. It ends and ten brown shirts descend on the kitchen. After a thorough cleaning, when the last dish is dried, the rich silence that has reigned all morning breaks. Tactical meetings, phone calls, accounting, preparing for guest visits, upkeep of grounds, a rich whirl of activity kicks into gear.

This industrious dance continues until the group gathers again for meditation at 7:00 PM. Silence again falls on the large house atop the small mountain, not to be broken until after breakfast the following morning. At 9:00 PM the meditation ends and people drift off to bed or continue meditating deep into the night. Whether people are meditating, cooking, fundraising, greeting guests, eating, or walking, the expectation is that these individuals retain an unbroken cultivation of mindfulness. Military-like standards of cleanliness and punctuality are maintained in all affairs and even the smallest thing, like how a hammer is placed on the table, are subject to feedback. Fastidiously keeping any and all verbal commitments, the individuals create an atmosphere of precision and trust with vows remade aloud each day to live lives built on honesty, non-violence, and service.

Welcome to the Monastic Academy, a small secular monastery deeply influenced by the forms and practices of Rinzai Zen. Renowned scholar and authority on religion, history, and

philosophy, Robert Thurman (1983) describes the Buddhist stance on social action as “one of total activism, an unswerving commitment to complete self-transformation and complete world-transformation” (Thurman, 1983, p. 19), yet this ideal is easier stated than achieved. The Monastic Academy, is one of a small, but growing number of institutions committed to creating the physical and social structures able to support individuals in achieving this ideal of “total activism” (Thurman, 1983, p. 19). It is a Monastery of the Future.

What follows is an attempt to explain what Monasteries of the Future are, why I care about them, and why perhaps you should too.

Overview

The modern world sparkles with possibility. Rising global affluence, great advances in technology, and vast new access to information are a few of the achievements. Yet serious cracks beneath the facade of progress threaten to overturn the system and, in a moment of great promise, lead us instead towards chaos and ruin. Perhaps the greatest threats, both to the well-being of individuals and the stability of the systems on which we depend, are rising inequality nationally and internationally, lack of environmental sustainability, and widespread alienation wrought by modern culture (Freinacht, 2017).

Inequality manifests in the upward redistribution of wealth, decreasing intergenerational earnings mobility (Stewart, 2018), gutting of the already paltry welfare systems, and consolidation of wealth amongst fewer and fewer individuals (Bernstein & Spielberg, 2017). Environmental degradation continues, seen in the wanton use of resources, the devastating effects of climate change, the toxification of the oceans, soils, and atmosphere, and the ravaging of aquatic and terrestrial ecosystems (McKibben, 2010; Leonard, 2010; & Kolbert, 2014). The

widespread alienation of modern people grows, evidenced by increased rates of depression (Weinberg et al., 2018), anxiety (Williams, 2017), suicide (Nutt, 2018), opioid use (Sullivan, 2018), and a pervasive sense of hopelessness (Radcliff, 2015), lack of meaning, and pessimism about the future.

These threats are not isolated from one another and, in fact, intertwine and support each other, all growing from the same taproot. They arise from the troubled state of the human heart and mind. Sustainability can never be achieved by developing technology if the core issue of insatiability is not addressed. Poverty cannot be eradicated by wealth generation if greed is not checked. Violence cannot be stopped by better policing practices or stronger armies if it is not countered by the cultivation of non-violence. Meaninglessness cannot be solved by buying more consumer goods, but only by igniting a new sense of purpose and commitment to ethics.

At the start of the millennium, in response to these threats and sensing the need for a psychology oriented not towards pathology but towards human flourishing, Seligman and Csikszentmihalyi articulated the outlines of positive psychology: “A science of positive subjective experience, positive individual traits, and positive institutions” (Seligman & Csikszentmihalyi, 2000, p. 5). While much work has since been done on the study of positive subjective experience and positive individual traits, the arena of positive institutions remains largely unexplored. In Seligman and Csikszentmihalyi’s (2000) seminal paper, positive institutions were defined as institutions “that move individuals toward better citizenship, responsibility, nurturance, altruism, civility, moderation, tolerance and work ethic” (p.5). The creation of such institutions is both urgent and timely.

I propose here one type of positive institution, Monasteries of the Future, designed to train a new generation of elite monks, also called contemplative adepts. Monasteries of the Future will develop adepts by training virtues such as compassion, gratitude, and forgiveness. They will also teach foundational mental capacities like self-regulation, sustained, voluntary attention, emotional intelligence, and meta-cognitive awareness. By pushing the envelope in the contemplative field these adepts will probe the upper limits of human flourishing. The refining and sharing of such an education supports both the amelioration of suffering in all its various forms and the cultivation of an enduring eudaemonic well-being.

In this paper, I start with a review of research on neuroplasticity which leads into an exploration of the field of expert skill development. Focusing on key elements of effective skill development including practice type and duration, I explore one particularly effective type of training called deliberate practice. Using deliberate practice as the gold standard, I explore what applying it to the contemplative field might look like.

I present strong initial findings on the value of mental training found in the basic research on various types of meditation. Then I describe some of the developmental possibilities that contemplative traditions have long claimed to be attainable. I focus on three developmental possibilities in particular: attention, compassion, and enlightenment. I explore their importance and the evidence that they are indeed trainable. Once understood as trainable skills, rather than fixed qualities, vast new horizons of possibility open.

I next explore how a lack of rigorous training standards contributes to a crisis of standards in the contemplative field. While our culture has already begun to understand the value of meditation, we have yet to create institutions that can guide the development of the field. I

introduce examples of people who have undergone rigorous training and argue that these experts, as in ages past, should be granted the respect needed to restore the integrity of the field.

Turning explicitly to Monasteries of the Future, I explain how the primary goal of these institutions will be the production of elite monks, capable of embodying and sharing the best of contemplative education. I introduce a vision for what these residential training centers might look like and explain some of the radical changes to our world that these Monasteries of the Future could usher in. I present an overview of contemplative science and explain how Monasteries of the Future will test contemplative claims, both modern and ancient, bringing scientific rigor to the contemplative field.

I explore the possibility of creating a network of Monasteries of the Future collaborating and competing much as universities do. The results of this work would be innovation, partnerships with modern science, and accountability. I then explore other benefits of monasteries both modern and historical and examine how such institutions might be financed.

Personal Background

Seven years ago, while on a meditation retreat in Thailand, something clicked. For the first time I fully tasted the chaos and distress that was lurking under my various projects and agendas, under the doingness of my life. Believing that profound poise and equanimity were possible and that these qualities would both support my own happiness and improve my capacity to serve, I dove into meditation. I had the good fortune to spend two months in silent retreat with B. Alan Wallace, a renowned meditation teacher and an authority on Tibetan Buddhism, during which time I began to understand the deep possibilities of contemplative training. I went on to complete another two-month retreat with Alan and then, according to his prescription for the

most effective way to develop quickly and steadily, I launched into a year of solitary retreat under his guidance at Roshi Joan Halifax's Forest Refuge in northern New Mexico. I then went back to Asia for nine months of training at a variety of monasteries and practice centers before returning to Roshi Joan's wilderness refuge for ten months more of solitary retreat. In the winter of 2017, I began a year of training and work at the Monastic Academy, an intensive residential program in northern Vermont overseen by Soryu Forall, a fierce and deeply practiced Rinzai Zen monk. I've also participated in a variety of shorter retreats ranging from seven days to a month, totaling more than six months. Since 2010, I've spent approximately five years and upwards of 10,000 hours in formal practice, studying meditation and related mind-body disciplines at monasteries and retreat centers both traditional and modern. Despite this experience, I feel that I am still just getting started.

Over the years I have had experience with a number of different contemplative training structures. My time in New Mexico's wilderness was reminiscent of the old school training of yogis in Tibet who undertook solitary retreats with direct guidance from a teacher. In Myanmar and Thailand, I lived and practiced at more than a dozen Theravada monasteries. In China, I stayed for three months at a remote Taoist monastery. My proximity to Upaya in Santa Fe while in New Mexico provided a view of a new contemplative form that combines social action, intensive practice, and a range of teachers and styles of meditation. The Monastic Academy later offered me another modern variant of monasticism. Short exposure at many other centers including an internship at Bodhi Heart Sanctuary (Malaysia), and retreats at Vallecitos Mountain Center (New Mexico), Cloud Mountain (Washington), and Dharma Ocean (Colorado), taught me more about how contemplative practice operates in the modern world.

One of the great gifts of Soryu Forall, Alan Wallace, Roshi Joan Halifax, Reggie Ray, Ajahn Succitto and my other teachers was the breadth of their vision for what is possible both individually and culturally. This vision came hand in hand with such high standards that I never accrued illusions about personal attainments. Friends I've met along the way have set similarly high standards. The year I spent at the Monastic Academy was one of the most challenging and intense of my life. My friend Peter is now completing his fourth year there. The almost two years I spent in New Mexico is eclipsed by yogis I know who have spent four, five, six, ten years in this kind of environment. The months I spent in monasteries in Myanmar are surpassed by monks both Burmese and Western who have lived there for decades.

This exposure humbled me and gave me a respect for the depth of development that is possible. I met people who were diagnosed with Attention Deficit and Hyperactivity Disorder (ADD and ADHD) as children who can now focus with unwavering attention for hours without lapse and people who were angry and confused youths who are now loving adults dedicated to service. I have also seen what can go wrong in such environments, how meditation is not a panacea, how its applications can be twisted and unhelpful, how people can waste thousands of hours in ineffective modes of practice. Spending time on the cushion (meditating), learning from friends and mentors, tasting different training environments, and making continual efforts to bring the teachings into daily life, have not yet made me a contemplative adept, but have given me an abiding respect for such adepts, and have instilled in me a vision for what intensive long-term meditation training can offer our aching world.

This vision is not mine: it was spun from dozens of sources, most importantly B. Alan Wallace and Soryu Forall. Alan often spoke of building a "world wide network of contemplative

observatories” (Wallace, 2012, p.1), while Soryu talks about “a forest of monasteries collaborating and competing to train the next generation of contemplative leaders” (S. Forall, personal communication, March 28, 2017). I’ve lifted the vision presented here from many sources, yet I take sole responsibility for any misinterpretations herein.

Change is Possible

The Ascendancy of Neuroplasticity

Until only a few decades ago, the scientific community widely believed that after childhood human neural architecture remained largely resistant to change (Lillard & Erisir, 2011). One of the most hopeful and significant developments in neuroscience is the demolition of this once cherished view (Trojan & Pokorny, 1999). New findings about neurogenesis—the creation of new neurons (Gross, 2000), and the adaptability of existing neuronal connectivity in adults (Goodman & Shatz, 1993) helped to undergird this revolution. Neuroplasticity is the new law of the land, and its attendant implications have ushered in newfound respect for the power of training and environment to shape brains.

In the 1960s, the pioneering work of Marian Diamond and her colleagues at UC Berkeley dealt the first of many blows against the prevailing dogma about rigid neural structures (Rosenzweig, Krech, Bennett, & Diamond, 1962). The team raised some rats in isolation and others in enriched environments with maze challenges, exercise equipment, and other rats. Analyzing the brains of the two groups, the team found significant differences both in weight and in the biochemical composition of the rats’ brains. Since then, neuroscientists have repeatedly demonstrated that the brain is anything but static and that it responds exceptionally to training. One of the most widely cited studies in this literature is the work of Eleanor Maguire who

studied the brains of London cab drivers (Maguire et al., 2000). She demonstrated that the hippocampus, a brain region responsible for spatial navigation, grows in people who undergo the rigorous London cab driver training, and thus demonstrated that learning can alter specific brain structures.

Expert Performance and Deliberate Practice

Of course, there's more to life than brains and where the rubber meets the road is not so much with enlarged hippocampi but with building skills, changing habits, and altering personalities. Skills, habits, and personalities, after all, are the stuff of our lives. When we change these in positive ways, we open the door for improving our quality of life and achieving greatness in a range of fields.

While scientists are still untangling what leads to world class performance, research points to a few important findings. Studying athletics, classical music, and other areas of endeavor in which people reach remarkable and clearly defined performance benchmarks, reveals compelling evidence that skill is largely a function of both how people practice and how much they practice (Ericsson, Krampe, & Tesch-Römer, 1993).

Practice makes perfect, or at least much better, but not all practice is created equal. "Naive practice" is a type of practice in which someone does something without much thought or attention, essentially blind repetition (Ericsson & Pool, 2016, p. 15). Using this kind of practice, people tend to show little or no growth. For example, your handwriting may not have improved much in the last decade despite spending hundreds or thousands of hours writing.

Another radically more effective form of practice is called "purposeful practice" (Ericsson & Pool, 2016, p. 14). This more demanding form is distinguished from naive

practice by a few important characteristics. For one thing, purposeful practice requires full attention, not mindless repetition. It requires immersion in, and total engagement with, the activity at hand. Secondly, purposeful practice has clear goals, both short and long term. People must discover where mistakes are made and work to correct specific elements of the skill to develop overall competency. For example, they cannot simply work to get better at golf, they have to realize that they keep hooking the ball left and then work to overcome that specific flaw. The process of chunking, or breaking up a larger activity into smaller, manageable, and trainable chunks, is an important element of purposeful practice. Lastly, purposeful practice requires getting out of a person's comfort zone. People must go to the edge of their capacity to improve.

In biological systems, every calorie and every nanometer of neural real estate matters. Bodies and brains consistently work to stay in homeostasis while expending as little energy as possible (Homeostasis, n.d.). This balancing between homeostasis and limiting energy expenditure creates an immense evolutionary pressure towards thriftiness and efficiency. And yet, when pushed, bodies and brains prove remarkably adaptable. Anyone who has ever exercised understands this principle. People stress muscles, pushing them past their comfort zone, and when they grow back, they grow back stronger (Schoenfeld, 2010). The body expends the necessary energy required to accommodate the increased stress. Much like physical muscles, the brain requires effort to break new ground.

There are many skills people practice purposefully for a time and experience significant growth in, but, when a certain level of acceptability and automaticity is reached, they plateau and stop (Ericsson & Pool, 2016). Take speaking English, for example. Children spend enormous amounts of time paying attention to the adults around them, working to mimic their sounds,

asking people to define words, sometimes memorizing vocabulary lists in school. Most children successfully learn ~10,000 words by the time they are eight (“Lexical Facts,” 2013). Typically by middle age a person’s vocabulary reaches 20,000–35,000 words and that is where it stops (“Lexical Facts,” 2013). What if they continued pushing? What if they looked up words, followed up with any they do not understand, acquired sophisticated vocabulary lists, and explored etymology? Inevitably, their vocabulary would grow. But without stress, without pushing at their limits, without breaking things down, nothing changes. It is not necessarily important to know more words, 25,000 might be just fine, thank you. But it is important to know that it is *possible* to learn more should people need or want to.

One step beyond purposeful practice is deliberate practice. Deliberate practice happens in exceptionally developed fields with clear performance metrics and coaches who have already achieved expert performance themselves (Ericsson, Krampe, & Tesch-Römer, 1993). These coaches can guide pupils using the hard-earned training techniques of the given field. Most great classical musicians and athletes use deliberate practice to reach the highest echelons of performance.

Another, perhaps unsurprising factor in performance, besides practice style, is practice duration. Simply put, those who put in more hours of the right type of practice develop the highest levels of skill. A study of world class violinists showed that total lifetime hours of practice was a critical factor in how skilled these musicians became (Ericsson et al., 1993). A similar study with ballet dancers confirmed these findings (Ureña, 2004). These results may seem obvious, but a love of prodigy stories and a belief in innate talent run deep in modern culture.

While it is inspiring to know that piano skills are within reach of those who apply themselves with the proper dedication and within the proper framework, imagine if these principles were applied to fields such as business (Unger, Keith, Hilling, Gielnik, & Frese, 2009), medicine (Ericsson, 2004), and education (Deslauriers, Schelew, & Wieman, 2011). The implications of these applications are staggering and yet there is an application even more profound. What if deliberate and purposeful practice were applied to cultivating virtues, for example, to the development of compassion, gratitude, patience, forgiveness, generosity, self-awareness and grit? Furthermore, what if these practice methods were applied to cultivating attentional skills and other fundamental cognitive and perceptual capacities?

Exactly how far could these skills be pushed if our culture took contemplative training seriously? Historically, monasteries were institutions where these skills were built and where long-term training environments, complete with all the requisite ingredients for deliberate practice, were provided. These experiments yielded important claims about what is possible for the human mind and heart. Today, scientists have begun subjecting various contemplative methods to modern empirical inquiry and evidence for the value of contemplative training is steadily mounting.

Meditation Works

Defining meditation may be a useful preface to the rest of this discussion. The term “meditation” covers an immense range of techniques of mental training, each designed to elicit specific outcomes. Observing the mind in a non-judgmental way, curtailing hatred with discursive exercises, paying attention to the sensations of breathing, and cultivating compassion by repeating particular phrases, are all examples of this enormous diversity.

Growth in Science

As recently as the 1970s, studying meditation could be a career-ending move for a serious scientist (Goleman & Davidson, 2017). Thanks to the work of some brave visionaries, the creation of networks such as the Mind and Life Institute, and advances in the ability to measure brain activity and structure, meditation has become one of hottest areas of study in the fields of psychology, neuroscience, and even medicine. By 1990, only a few hundred peer-reviewed papers had ever been published on the topics of mindfulness and meditation (Goleman & Davidson, 2017, p. 14). In 2015 alone, 1,098 such papers were published and the number of papers published annually continues to climb.

Overview of Benefits of Meditation

Meditation has indeed been shown to reduce stress (Grossman, Niemann, Schmidt, & Walach, 2004), but it has also been shown to affect a much wider range of cognitive and emotional processes. Meditation can increase rational thinking (Hafenbrack, Kinias, & Barsade, 2014), decrease cognitive bias (Kang, Gray, & Dovidio, 2014), decrease amygdala response—a brain region associated with fear (Desbordes et al., 2012), increase well-being (Goodman, & Schorling, 2012), enhance metacognitive capacities (Baird, Mrazek, Phillips, & Schooler, 2014), improve emotional regulation (Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007; Hill, & Updegraff, 2012), and build resilience (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008).

Scientists are even finding that meditation can create substantial and surprising physiological shifts which have major implications for health. Mindfulness Based Stress Reduction (MBSR), an eight-week meditation course with nine in-person classes, a half hour of homework per day, and a one-day silent retreat, can turn off genes that negatively impact stress (Creswell et al., 2012). Another study of MBSR showed that meditation can improve both brain and immune function (Davidson et al., 2003). A three-month residential meditation retreat increased the activity of telomerase, a critical enzyme responsible for protecting the body from the effects of aging (Jacobs et al., 2011).

While still inconclusive, there is preliminary evidence that meditation can create significant morphological changes to brain structure including cortical thickness (Lazar et al., 2005) and increased grey matter density in the brain stem (Vestergaard-Poulsen et al., 2009). A large-scale review of multiple studies revealed eight brain regions predictably altered in meditators, including regions critical for memory formation and recall (hippocampus), meta-awareness—the conscious awareness of cognition (fronto-polar cortex), external body awareness (sensory cortex), internal body awareness (insula), decision making, self-regulation and emotional regulation (anterior cingulate cortex, mid cingulate cortex, orbitofrontal cortex), interhemispheric communication (corpus callosum), and intrahemispheric communication (superior longitudinal fasciculus) (Fox et al., 2014).

Issues with the Research

These diverse and impressive results have created buzz, turning meditation not only into a hot topic in science, but also in education, business, and even the military. Unfortunately, some of the recent upsurge of conversation is marked by shady salesmanship, hype, and less than

perfect science. The methodological critiques include a dearth of randomized control designs and longitudinal studies; over-reliance on correlational research and self-reports; small sample sizes; studies without active controls; conflicting definitions of “mindfulness” and “skilled” vs. “novice” practitioners; improper consideration of potential adverse effects; conflicts of interest of investigators; and difficulties operationalizing and measuring core constructs such as “mindfulness” (Van Dam et al., 2018).

The various methodological shortcomings, however, do not point to the uselessness of meditation, but rather to the need for a new generation of ever more precise research. David Vargo, a prominent neuroscientist puts it bluntly: “The science isn’t bad; it’s young” (Harris, 2017). Many of the challenges also arise from the confusion of scientists who lack a coherent and nuanced understanding of meditation. Closer collaboration with contemplative adepts in designing and carrying out studies could support the production of evermore nuanced, sophisticated, and revealing research.

Deeper Developmental Possibilities

Short vs. Long-Term Training

While research on meditation is still in its infancy, the traditions that have sustained and honed contemplative practice for millennia are not. These traditions, with hard-earned knowledge about how to undertake contemplative training, have long posited that emotions, cognition, attention, and perception can be radically transformed. They posit that a shift from rigidity and imbalance to enormous psychological flexibility and freedom is possible.

Practicing meditation for brief periods throughout the day, anywhere from a few minutes to a few hours, is increasingly common in the United States. The addition of meditation to an

otherwise largely unchanged lifestyle spreads the practices broadly, but this approach is very different from that of full-time contemplatives who have spent years dedicated to full-time training (Goleman & Davidson, 2017).

Thus far, most of the meditation research focuses on relatively short-term interventions with eight-week non-residential courses such as MBSR or Stanford's Cultivating Compassion Training (CCT) figuring prominently. Yet, if meditation shows promise with short-term training, what if the methods of deliberate and purposeful practice were applied to meditation training over the course of thousands of hours? What might be achieved? What might be discovered? According to both traditional contemplative accounts and preliminary modern scientific findings, possibilities exist that cut much deeper than just feeling a little better and experiencing somewhat reduced stress.

Traditional accounts offer significant insight into these further possibilities. While some claims may seem extraordinary, perhaps even fanciful or supernatural, it is important to remember that these claims are made by people with extraordinary levels of training. Much as meditating thirty minutes per day for eight weeks and meeting in weekly groups for two hours each week (the structure of MBSR courses) often produces shifts such as reduced self-reported stress and depression (Goldin & Gross, 2010), meditating twelve hours a day for a decade also carries its own particular developmental possibilities. I present three claims that, if true, carry with them seismic implications for human potential. These claims point to the further shores of training attention, compassion, and enlightenment.

Attention

Bold claims. William James, the father of modern psychology, understood the power of attention. He claimed that the “faculty of voluntarily bringing back a wandering attention, over and over again, is the very root of judgement, character, and will.” He went on, asserting “an education which should improve this faculty would be the education par excellence” (James, 1890, p. 463).

This bold claim makes sense when we understand that attention underlies our ability to do, literally, everything. B. Alan Wallace, a leading contemplative teacher and authority on Tibetan Buddhism, cites relaxation, stability, and vividness as three aspects of attention that are trained in tandem in many traditional meditation practices (Wallace & Shapiro, 2006). These qualities of attention are obviously preferable to their opposites—tension, scatteredness, and dullness—for virtually any activity. Which qualities of attention are preferable for studying for an exam, writing a report, giving a presentation, talking with a friend, looking at a painting, sitting on the beach? Simply put, longer duration and greater quality of sustained, voluntary attention is foundational to all activities and to all forms of skill development.

Research confirms that the ability to control attention, cognition, affect, and behavior are all closely linked and have important implications for physical and mental health (Shapiro, Schwartz, & Astin, 1996). Lack of attentional control is linked to psychological dysfunction while its development is linked to psychological well-being (Teasdale et al., 2000).

Character. But the implications run even deeper than improved performance, learning, and well-being. William James cites “judgement, character, and will” (James, 1890, p. 463) as qualities supported by improved attention. If thoughts often dictate actions, then what people

think about will impact their behavior. Most people spend the majority of their lives absorbed in thoughts (Killingsworth & Gilbert, 2010), engaged in a constant background dialogue. The degree to which one can control attention is the degree to which one can transform their relationship with this dialogue. As William James said, “my experience is what I agree to attend to” (James, 2007, p. 402). You can pay attention to fantasies of how much you want a new BMW or you can pay attention to the man on the street asking for a dollar. Which one you choose to attend to may well influence your behavior. Changing behavior is of course a key to changing one’s entire lifestyles.

Bliss. Bliss, a rapturous delight felt throughout the entire body and mind, is a byproduct of refined attention. This is perhaps the most surprising claim about attentional training. Although this might sound dubious to modern ears, the conclusion is widely supported across not only all the major schools of Buddhism (Sarbacker, 2012; Austin, 1998; Brahm, 2006; Wallace, 2006), but also in Taoism (Cleary, 2003), and Hinduism (Sarbacker, 2012).

Mihaly Csikszentmihalyi (1990) came to a similar conclusion from his research on what he dubbed “flow states.” These states are characterized by intense focus and deep engagement, and they correlate both with enhanced performance and profound joy (Csikszentmihalyi, 1990). Accounts of in-the-zone moments that people experience when time slows down, ego dissolves, and performance reaches new heights of virtuosity helped birth this theory. Flow is so central to a meaningful life that Seligman included it as one of the five pillars of his PERMA model for well-being (Seligman, 2012). PERMA, an acronym, stands for positive emotions, relationships, engagement, meaning, and accomplishment. Seligman (2012) uses the word “engagement” (p. 16) to describe the quality of concentrated attention Csikszentmihalyi (1990) has long

researched. The inclusion of “engagement” as a core element of PERMA bespeaks its importance. While it is premature to categorically link flow to meditative absorption without further investigation, there is certainly a promising overlap. Perhaps deep states of concentration are a special type of flow state induced through rigorous meditation practice.

B. Alan Wallace speaks for the Tibetan tradition when he claims that the mind free from perturbation, the mind with impeccably honed attention, is, at its core, infused with the three qualities of “bliss, luminosity, and non-conceptuality” (Wallace, 2009, p. 20). Wallace introduces this claim based on classical texts that are, in turn, rooted in phenomenological reports from dozens of generations of monks and yogis. Ajahn Brahm, a monk from the Theravada tradition, echoes this claim when he asserts that once a meditator establishes enough concentration “all [the meditator’s mind] can know is one thing, and that is timeless bliss that doesn’t move” (Brahm, 2006, p. 154). Brahm evocatively refers to this experience as “better than sex” (Horayangura, 2008).

History of training. While William James wondered if attention could be trained, some traditions have thousands of years of practice in doing just that. Shamatha (Sanskrit) or samatha (Pali) meditation is the practice of calming the mind and training it to focus on an object of choice. Examples of traditional objects are the breath, a mantra (a phrase), different parts of the body, visual objects such as a candle flame, and mental images. Shamatha meditation trains the skill of remaining single-pointedly focused while releasing extraneous thoughts and refining the brightness and stability of attention. This skill is called samadhi (Sanskrit). Over a hundred generations of contemplatives have reported that attention (samadhi) is indeed a trainable skill (Wallace, 2006).

Modern validation of attentional training. Emerging science supports the conclusion that training attention is possible. The results from the Shamatha Project, which at the time (2007) was the most expensive and largest longitudinal study of meditation ever undertaken, revealed that three months of intensive meditation training with an average of five hours of practice per day led to improvements in sustained, voluntary attention (MacLean et al., 2010). Sustained attention wanes as individuals spend time focusing on a given task. Scientists measure perceptual sensitivity to track this decline. After undergoing the three-month training, meditators in the Shamatha Project demonstrated improvements in vigilance on visual attention tasks, and improvements in visual discrimination that were linked to increases in perceptual sensitivity and thus sustained attention (MacLean et al., 2010). These findings suggest that the skills trained by focusing on the breath translate to other tasks.

Other research found that a one-month-long retreat improved the alerting subsystem of attention, the system that informs people that they have strayed from their target (Jha, Krompinger, & Baime 2007). An eight-week MBSR course improved the orienting function of attention, the ability to selectively turn towards a chosen object (Jha, Krompinger, & Baime 2007). Another study showed that just two weeks of meditation training decreased mind wandering and improved cognitive function on both a working memory task and a reading comprehension test (Mrazek, Franklin, Phillips, Baird, & Schooler, 2013).

The “education par excellence” (James, 1890, p. 463) is not a pipe dream after all. While modern science has yet to prove that the deeply focused mind is a bottomless source of bliss or that attention is highly correlated with character, or even to fully flesh out how attention is linked

to learning and performance, there is much promise. The yields of carefully testing these hypotheses could be tremendous.

Compassion

Compassion is a sense of caring, concern, and commitment to other beings linked with the desire to relieve their suffering, pain, or distress and contribute to their well-being (Dalai Lama, 2003). Few qualities of heart have deeper implications than this. Wouldn't you rather your friends and family had this quality? Wouldn't you rather your neighbors had this quality? Wouldn't you rather your leaders had this quality? Wouldn't you rather you had this quality? Developing and spreading compassion would make our world more peaceful, workable, safer, fairer, and happier in ways big and small, both easily imagined and almost unimaginable. The question is, as with attention, can people be trained in compassion?

Research demonstrates that practicing compassion can reduce the responses of the amygdala (Desbordes et al., 2012), and can reduce intragroup bias (Desbordes et al., 2012; Kang, Gray, & Dovidio, 2014). Compassion training is also associated with functional shifts in select brain regions (Klimecki, Leiberg, Lamm, & Singer, 2012). Before a compassion training intervention, participants experienced negative affect and activation in brain regions associated with empathic responses to pain when confronted with videos of people in distress. After a one-day retreat, short daily practice, and two hours of follow up training with compassion meditation, the same participants showed increased activity in brain regions associated with positive affect and affiliation when shown the videos of people in distress. This hints that people can learn to respond to distress in ways that preserve their own mental balance while still remaining connected and ready to help. Furthermore, in a study comparing expert and novice compassion

meditators Lutz, Brefczynskik-Lewis, Johnstone, and Davidson (2008) found that expert meditators displayed higher activation in a number of systems typically linked with empathy and theory of mind, including the insula and cingulate cortices. This indicates that compassion training changes the activation patterns in the brain to potentially reflect greater care and concern for others in distress.

Compassion training also generates positive health effects for those who practice it. A six-week compassion course that met twice a week for fifty minutes reduced negative stress-induced immune and behavioral responses during a stress test in the laboratory, demonstrating positive effects on the neuroendocrine and immune systems (Pace, Negi, Adame, Cole, Sivilli, Brown, Issa, & Raison, 2009). This connection between compassion and the immune and endocrine systems offers a tantalizing glimpse into how the quality of our relationships and thoughts impacts the physical body, and adds a powerful argument for why compassion practices should be widely disseminated.

Fascinating research coming out of Richard Davidson's lab at the University of Wisconsin shows even greater possibilities. Yogis—individuals with extensive training in contemplative arts—were invited to Dr. Davidson's lab where they practiced compassion meditation while an electroencephalogram (EEG) monitored the electrical activity in their brains. When the first yogi came, the readings showed such extreme amounts of brain activity that the technicians thought there must have been a glitch (Goleman & Davidson, 2017). There was no glitch; there were just massive bursts of brain activity associated with the practice of compassion meditation that were unlike anything the research team had ever before seen. Imagine you are in an airplane cruising along when all of sudden it goes into free fall, nose down. Your brain, if it

were attached to an EEG, would likely show a massive spike of activity associated with fear. What researchers witnessed in this experiment was an equivalent spike of activity, however, for the yogis it was the type of brain activity associated with maternal love and care and it was voluntarily conjured. These results were ultimately published in the prestigious journal *Proceedings of the National Academy of Sciences (PNAS)* (Lutz, Greischar, Rawlings, Ricard, & Davidson, 2004). While not double blind, nor longitudinal, these studies nonetheless deserve our attention.

Enlightenment

What is enlightenment? Enlightenment—the dropping of all cognitive biases and the ensuing sense of awe, wonder, freedom and connectedness—might outstrip even compassion and attention in its potential to change individuals and society. That said, this territory is notoriously difficult to define, articulate, and conceptualize, and is fraught with the limitations of language. My knowledge is limited on the subject so I will touch on it only lightly.

Enlightenment is associated with a radically altered view of the world and a transformed sense of self (Harada, 2018; Khyentse, 2006; Buddharakkhita, 1985). Some variation of the state is referenced in diverse traditions, including all schools of Buddhism. Although defined and conceptualized somewhat differently by different traditions, the salient characteristic is a profound reorientation of perception whereby the sense of a solid and independent self dissolves. It is typically accompanied by a tremendous sense of ease and well-being that remains independent of conditions and is marked by an attendant and continuous sense of care for other beings. It can be experienced in glimpses and can also be sustained as an ongoing state.

Classical view. Dilgo Khyentse Rinpoche, one of the most revered Tibetan Buddhist teachers of the last century, described experiencing primordial awareness, or enlightenment, as resting in “the empty nature of the mind beyond all mental elaborations, in that state which is free from clinging, a clarity which is beyond all concepts” (Khyentse, 2006, p. 27). Shodo Harada Roshi, a towering figure of Japanese Rinzai Zen, describes enlightenment as, “we hear, we see, and we leave each thing as we hear or see it, adding nothing at all to it... Changing with every single moment, our mind manifests our clear nature. This is ‘abiding nowhere, awakened mind arises’” (Harada, 2018, p. 85). The Theravada (the classical school of Buddhism practiced in India and Southeast Asia) notion of enlightenment depicts someone totally free from greed, hatred, delusion, ignorance, and craving.

There is no more worldly existence for the wise one who, like the earth, resents nothing, who is firm as a high pillar and as pure as a deep pool free from mud. Calm is his thought, calm his speech, and calm his deed, who, truly knowing, is wholly freed, perfectly tranquil and wise. (Buddharakkhita, 1985, p. 37)

Modern view. One modern way, perhaps, to understand some of the neural correlates of enlightenment is by studying the “default mode network.” The default mode network is a brain network associated with mind wandering, self-referential processing, and unhappiness, associated with the endless narrative of “me and mine” that tends to course through brains not otherwise engaged (Brewer et al., 2011). A team of researchers demonstrated that experienced meditators with ~5,000 - ~10,000 hours of lifetime practice were able to largely deactivate this network while practicing three different types of meditation (Brewer et al., 2011). They also found significant differences in the network during the baseline (non-meditating) condition for

the two groups. This study points to ways that fundamental brain activity and self-concept can shift in response to meditation training and might be a way for science to begin to understand enlightenment experiences.

Andrew Newberg, a neuroscientist and physician at Jefferson University Hospital, unpacks enlightenment from a scientific point of view. He explores what he calls big “E” experiences that have the characteristics of intensity, clarity, oneness, surrender, and permanent change (Newberg & Waldman, 2017). Dr. Newberg points to the power of sudden perceptual shifts to create lasting positive impacts, such as increased spirituality and sense of purpose in life, and improved health and relationships. These experiences can arise spontaneously, for example, during extreme or even everyday life events, but they are often linked with contemplative training (Newberg & Waldman, 2017). While this research is valuable, when compared to contemplative maps, such as those laid out by experts both historical and modern in the Zen, Theravada, and Tibetan traditions, the experiences Newberg studied are limited. Much more is possible beyond the intense states that he explored. His description, like most modern descriptions, pale in comparison to traditional accounts.

Differing standards. To get a sense of how much the standards can vary, take the example of Hakuin, one of the great Zen masters of the 18th century. At the youthful age of 21 he experienced an enlightenment of sorts. “At around midnight on the seventh and final night of my practice, the boom of a bell from a distant temple reached my ears: suddenly, my body and mind dropped completely away. I rose clear of even the finest dust” (Kenshō, n.d.). Despite this experience, Shōju Rojin (Hakuin’s teacher and one of the preeminent masters of Hakuin’s day) saw a remaining arrogance in his pupil. He instructed Hakuin to continue practicing diligently

until Hakuin ultimately reached a much deeper experience of awakening at the age of 41 (Kenshō, n.d.). This shows profound differences between enlightenment experiences, and it suggests the importance of continued, long-term training.

The Modern Contemplative Field

Dilution of Standards

The most exceptional accomplishments resulting from training attention, compassion, and enlightenment extend far beyond the common discourse in the modern contemplative field. The contemplative field has a long history of rigorous training with monastics and yogis typically devoting tens of thousands of hours and many years to intensive full-time training within clear traditions and under the guidance of expert teachers before themselves becoming teachers. Many modern teachers, however, lack even a modicum of this training.

What has emerged is a field that tends to be defined not so much by consensus standards of experts, but by popularity. Today, writing a bestseller is perhaps one of the most effective ways to become an authority on meditation and spirituality. This is a recipe for trouble, inviting incoherence, dilution, and manipulation. What other serious field anoints experts without rigorous training?

Many of the so-called experts in the field pull from traditional texts, even using Pali and Sanskrit words, but freely redefine what these terms mean. One example of this form of dilution by way of redefinition is the modern understanding of “shamatha.” Shamatha is not only the word for training in attention, calmness, and one-pointedness, but is also the word for the achievement of a high degree of attainment in these skills (Wallace, 2006). The use of shamatha

practice to develop samadhi is traditionally considered an important part of spiritual training and the standards for samadhi are defined by various traditions.

Buddhaghosa, a 5th century contemplative and author and the preeminent source on early Buddhism, said that once a proficient level of samadhi is achieved, a meditator can stay concentrated for “a whole night and a whole day, just as a healthy man, after rising from his seat, could stand a whole day” (Buddhaghosa, 2010, p. 122). Tsongkhapa, a 14th century monk whose profound erudition, scholarship, and depth of practice make him one of the world’s most important religious and contemplative figures, clarified the work of earlier contemplatives and laid out ten stages of attentional development (Tsong-kha-pa, 2002). The fourth stage is the ability to remain undistracted for an hour at a stretch, the tenth is the ability to enter at will a state of utter absorption with an object and stay without the slightest laxity or excitation in deep bliss for upwards of four hours, without becoming fatigued or drained by the process (Wallace, 2006).

Today, so-called experts of Buddhism often say that samadhi is unnecessary or indeed even impossible. Popular literature and discourse are rife with teachers casually saying things such as “thoughts will never actually go away, just observe them.” This is a far cry from even the fourth stage articulated by Tsongkhapa, when unbroken attention for an hour is achieved. The lack of basic respect for, indeed even belief in, samadhi that many meditation teachers profess is akin to a high-level particle physicist claiming that advanced mathematics is unnecessary. The conclusion is absurd given that samadhi is a basic building block for virtually all contemplative practices (Wallace, 2006).

With this level of confusion about basic capacities, such as the ability to pay attention to your breath for an hour without fatigue and distraction, imagine how much more corrupt and confused would be people's conception "one who, like the earth, resents nothing, who... is wholly freed, perfectly tranquil and wise" (Buddharakkhita, 1985, p. 37), or one able to "leave each thing as we hear or see it, adding nothing at all to it" (Harada, 2018, p. 85), or the "state which is free from clinging, a clarity which is beyond all concepts" (Khyentse, 2006, p. 27).

Most modern readers fail to realize that these masters are not just dishing up lofty prose but are actually describing something specific, albeit difficult to put into words. They are talking about something real, something precise, something that is not anything else. Just as when I say "dog" I do not mean "rat" when Dilgo Khyentse Rinpoche says "free from clinging" (Khyentse, 2006, p. 27) he is not referring to anything that is kind of like "free from clinging;" he is referring to a specific way of being that *is* "free from clinging" (Khyentse, 2006, p. 27). To say "dog and rat are basically the same thing," is as absurd as saying that my definition of "free from clinging" is probably pretty much the same as Dilgo Khyentse's.

Traditional descriptions are rarely afforded the respect they deserve. Instead many modern teachers equate whatever degree of attention, compassion, and enlightenment that that they themselves have achieved with the level of attention, compassion, and enlightenment discussed in classical texts. Diluting the standards and presenting new views as ancient truths damages the integrity of the field and robs people of ever knowing the true possibility of these teachings.

Dilgo Khyentse Rinpoche describes what it is like "when you have truly attained the realization of this emptiness" (Khyentse, 2006, p. 25), the deepest understanding in his tradition:

You will be like the venerable Milarepa or Guru Rinpoche, who were unaffected by the heat of summer or the cold of winter, and who could not be burned by fire or drowned in water. In emptiness there is neither pain nor suffering. We, on the other hand, have not understood the empty nature of the mind and so, when bitten by even a small insect, we think, ‘Ouch! I’ve been bitten. It hurts!’ or, when someone says something unkind, we get angry. That is a sign that we have not realized the mind’s empty nature. (Khyentse, 2006, p. 25)

Which modern teacher meets the standard of not being burned by fire? Is this just hyperbole? Perhaps, although reading about the serene determination of Thích Quảng Đức during his 1963 self-immolation in protest of the war in Vietnam asks us to take such claims more seriously. David Halberstam, a reporter for the New York Times, later wrote,

flames were coming from a human being; his body was slowly withering and shriveling up, his head blackening and charring. In the air was the smell of burning flesh; human beings burn surprisingly quickly... I was too shocked to cry, too confused to take notes or ask questions, too bewildered to even think.... As he burned he never moved a muscle, never uttered a sound, his outward composure in sharp contrast to the wailing people around him. (Halberstam, 1965, p. 211)

Deep Training

Historical examples of deep training. Historically, examples of teachers who set a high bar for contemplative training abound. One classically trained teacher is Master Joshu. Born in 778 CE, he was a spiritual prodigy, experiencing a verified breakthrough experience—initial enlightenment as confirmed by his teacher, Nansen—at the age of seventeen, and full-

enlightenment at twenty (S. Forall, personal communication, 2018, June 21; Zhàozhōu Cōngshěn, n.d.). He continued to train under Nansen, one of the most revered teachers of his time, for thirty years. Afterwards, Joshu wandered China during a golden era of spiritual development, further deepening his experience under a host of the most qualified masters of the day for another thirty years. Finally at the ripe age of eighty, after six decades of intensive study and mentorship, he began teaching and ultimately developed many of the most important koans in Zen (Zhàozhōu Cōngshěn, n.d.).

Deep training did not die in the 8th century. The biographies of Ajahn Mun (Boowa, 2003) and Ajahn Lee (Dhammadharo, 2002) provide a taste of the rigor within the Thai Forest tradition, a revival movement in Thai Buddhism at the turn of the 20th century. The early Thai Forest monks were known to undertake intense discipline for decades at a time. Often they embarked on dangerous wandering journeys, subjecting themselves to challenges such as extended stays in caves; arduous hikes through deep wilderness; limited intake of food and water; and extended exposure to unpredictable weather, deadly animals large and small, and dangerous thieves and bandits (Boowa, 2003). *Blazing Splendor*, a biography of Tulku Urgyn Rinpoche, one of the great Tibetan masters of the 20th century, recounts many stories of the old guard of Tibetan Buddhism with equally impressive training, demonstrating that serious training occurred across vastly different geographies and traditions (Kunsang & Sschmidt, 2005).

Modern examples of deep training. Rigor is still alive and well today; it is just all too rare. Tenzin Palmo spent thirteen years in solitary retreat in a cave high in the Indian Himalayas, emerging in 1988 (Mackenzie, 1998). Ajahn Brahm spent over a decade sweating in the jungles of Thailand under the brutal and careful tutelage of Ajahn Chah until Ajahn Chah's death in

1992. Some teachers, such as Reginald Ray, accumulated upwards of 30,000 hours of lifetime practice while living lives as lay practitioners. Others, like Soryu Forall, accumulated equivalent amounts of experience through a combination of lay and monastic training.

Value of hard-earned training. When people take the time to invest deeply in training, tremendous and far-reaching benefit often follow. The Thai Forest tradition is an excellent example. The pioneers in the late 1800s set the stage for Ajahn Chah (1918 - 1992), who in turn trained Ajahn Brahm, who upon emerging from the jungles of Thailand built a flourishing monastery in Western Australia. Bodhinyana, Ajahn Brahm's monastery, now trains dozens of monks and nuns full-time and boasts a lay community of thousands, while Ajahn Brahm's recorded talks reach tens of thousands more through social media. He is just one of many who came from Ajahn Chah's monastery in Thailand. Others include Ajahn Amaro, Jack Kornfield, Ajahn Sumedho, Ajahn Pasanno, and Ajahn Jayasaro, all of whom became teachers or built centers both traditional and modern in the United States, Thailand, Australia, England, Canada, and elsewhere. Tenzin Palmo, upon completion of her period of solitary retreat, started a school for women in Northern India that has over 100 nuns in full-time residential training. Both her teachings and a popular biography of her life (Mackenzie, 1998) have touched and inspired countless people worldwide.

Dilgo Kheyntse Rinpoche (1910 - 1991), the great Tibetan teacher, began learning meditation at the age of seven. While still in his teens, he started a thirteen-year-long solitary retreat. Ultimately settling in Bhutan, he became one of the most important masters of the Nyingma school of Tibetan Buddhism and is widely considered to have contributed to keeping the tradition alive. Among the impressive benefits of Dilgo Khyentse's life was the thorough

training of one his close disciples, Matthieu Ricard. Almost two decades of training with Dilgo Khyentse Rinpoche prepared Matthieu Ricard to play an instrumental role in introducing Buddhism to the West through his writing, photography, and talks. Matthieu Ricard also helped to reestablish Shechen Monastery with over 300 monks and launched impressive humanitarian efforts throughout India, Nepal, and Tibet, including providing clean drinking water and sustainable livelihood to thousands.

Reggie Ray and Soryu Forall have also founded impressive centers generating the necessary resources to provide homes for intensive training in the modern world. Tulku Urgyen Rinpoche, Mingyur Rinpoche, The Dalai Lama, Thich Nhat Hanh, and Roshi Joan Halifax are a few amongst many others who have used years of intensive training as a basis for creating communities, sharing ideas, offering teachings, launching humanitarian efforts, writing books, and otherwise paying forward their training with remarkable contributions to global culture.

Role for teachers with limited experience and training. The problem is not that people teach with minimal meditation experience and understanding; it is that people teach with limited experience and understanding without acknowledging the limits of their experience and understanding.

For example, someone could be highly qualified to teach high school biology because he is good with kids, has a solid curriculum, and follows sound pedagogy. He does not need to be a research scientist. He just needs to know what the experts say and be able to share those findings. But a Ph.D in biology needs significantly more training to be an expert in her field. Experts who have devoted their lives to learning both the methods and the content of their field are able to move science forward and consensus among experts sets the standards for the field. The fruits

can in turn be disseminated by non-experts through high school classes, popular books, YouTube videos, and conversations among friends.

Courses like MBSR and the associated teacher trainings could be very helpful to the contemplative field if they were embedded within a framework that points to further possibilities rather than claiming outsized authority. Most people who become great pianists do not start out with highly talented teachers. They begin with caring mentors who offer encouragement and support in the early stages of skill development (Ericsson & Pool, 2016, p. 189). Lack of world class piano skills is not a problem for these teachers, but not believing that world class piano skills are possible to acquire *is* a big problem. People who have only minimal training can, of course, provide tremendous benefit and will play a vital role in teaching and sharing contemplative practices in the coming decades.

Overview of Monasteries of the Future

Monasteries of the Future, as I perceive them, will be institutions designed to provide the requisite financial, social, intellectual, and instructional support necessary to train a new generation of elite monks (contemplative adepts). They will be places where the urgent questions of what inner skills are trainable, how trainable they are, and how best to train them can be answered.

A few notes on terminology: Traditionally monks were the men and nuns were the women who lived within monastic orders following the strict disciplines of their order. I here use the word “monk” in a degendered sense to apply to males, females, and everyone else. I also use “elite monk” as a catch all for the various types of people who undergo intensive long-term contemplative training whether or not that occurs within a delineated monastic community. Yogi,

for example, is a traditional term that applies to those who lead lives devoted to practice. They are often, but not always, monks with the intensity and duration of practice defining them, rather than allegiance to any particular set of rules or order. Here, serious yogis are subsumed in the category of elite monk.

Vision

Monasteries of the Future will be residential centers that provide housing, food, and space for people as they train full-time. Residents may number from a handful to hundreds or even thousands. For each elite monk capable of acting as a teacher and coach, there may be up to a few dozen trainees. Every monastery will have its own campus, ideally situated in a location that is clean, quiet, and connected to a natural landscape. They will be located at a slight distance both physically and psychically from the hustle and bustle of the modern world, to provide a concentrated and contained environment conducive to the contemplative practice.

The most significant priority will be creating elite monks. At the moment, the dearth of qualified adepts is perhaps the most significant bottleneck in creating a widespread network of Monasteries of the Future. The training, focusing on minting elite monks with both the requisite contemplative skills and the worldly acumen to start their own monasteries, would range from a few years to many decades. In this way a network of centers could blossom over the coming decades and expand exponentially until the training is widely available.

Unlike law and medicine degrees that come with expensive price tags, Monasteries of the Future will need to find ways to fund contemplative training for all—regardless of financial means. Ideally, Monasteries of the Future will create pathway for social mobility, rather than the consolidation of privilege—training elite, rather than elitist monks.

Production of Elite Monks

Monasteries of the Future will produce contemplative adepts capable of demonstrating refined attention, immense compassion, and steady enlightenment. These adepts will possess a deep fluency and skillfulness with the interaction of cognitive, emotional, and bodily processes and uphold strict ethical standards including a relentless commitment to honesty and non-violence. Through altruistic behavior, high subjective well-being, and clarified perception, these adepts will embody the skills and understanding of their training. Given the complexity of contemplative mastery, we may expect a level of training that rivals fields such as law and medicine. To achieve this, Monasteries of the Future will sustain career monks much as universities sustain career academics.

Our earlier discussion of deliberate practice and achieving expertise informs the vision of these institutions. Remember, it was only the violinists who had trained for many thousands of hours that were the virtuosos (Ericsson et al., 1993). So too, our virtuosos of attention, compassion, and enlightenment need time to train. Many years of full-time training, comprising upwards of ten thousand hours of deliberate practice, is a basic benchmark that we can expect of contemplative experts. This practice will consistently push students to the edge of their capacities and break down larger skills into smaller trainable skills, all under the guidance of experts who have demonstrated a capacity for sharing and teaching these skills (Ericsson et al., 1993).

Many of the people today who have been through intensive, long-term contemplative training made great sacrifices to receive their training. Learning foreign languages; enduring the intense heat of Northern Thailand or the frigid winters of Tibet; dodging poisonous snakes and spiders; contracting illnesses such as dengue fever, malaria, and typhoid; suffering violent, and at

times nearly fatal, digestive infections from unsanitary water and food are typical experiences of people with tens of thousands of hours of training. While their valor is inspiring and we are lucky to reap the benefits of their sacrifices, contemplatives ought not need to risk their lives to receive training. Those who wish to train should be given safe, sanitary conditions with proper nutrition and sound housing.

Some cultures, including those of India, Thailand, and Tibet, have long understood the value of contemplative training both in individual and monastic settings. In addition to a free lunch, literally, seekers received psychic support from the lay community. Lay people demonstrated this support by offering gifts, bowing, and addressing monks by honorifics (Tambiah, 2007, p.358). This form of social support cannot be underestimated and must be sewn into the structure of Monasteries of the Future. Mustering the effort to complete medical school, for example, is challenging, even with respect and encouragement from family, friends and society. Imagine attempting such an endeavor in a culture that did not understand, value, or compensate medical training.

Monasteries of the Future will promote high self-efficacy and a growth mindset about contemplative skills. They will offer the social support, motivation, and inspiration vital for persevering through the rigors of training. Self-efficacy, the degree to which people believe that they are capable of doing something, impacts what people choose to take on, how persistent they are, how much effort they apply, and, ultimately, their level of achievement (Bandura, 1977; Schunk, 1995). In a similar vein, Carol Dweck and her colleagues discovered that children's fundamental attitudes about learning and intelligence deeply affect their academic performance

and largely determine how they respond to setbacks (Dweck, 2008). She coined the term “growth mindset” to refer to the belief that abilities can be developed and are not fixed (Dweck, 2008).

While early differences in skill exist in most domains, they rarely persist (Ericsson & Pool, 2016, p. 226). For example, when people are learning to play chess, higher IQ correlates with improved performance, but this difference disappears early in training. In fact, controlling for education, grand masters, the best chess players in the world, have IQs no higher than average adults, and among grand masters IQ does not correlate with ranking (Ericsson & Pool, p. 228).

Diverse Populations

Monasteries of the Future will serve a wide range of demographics. As in traditional monasteries, Monasteries of the Future will open their doors to people of varying ages, genders, and socioeconomic statuses, thereby supporting both social mobility and cohesion.

Children. Young children are a population with enormous potential. For more than a thousand years Tibetans have selected reincarnate lamas, called tulkus. These tulkus begin intensive training regimens as young as infancy (Ray, 1986). The result has been the cultivation of generation after generation of deeply trained adepts. Mingyur Rinpoche, the current Dalai Lama, and Tulku Urgyn Rinpoche are just a few of many modern examples. Whether or not a person believes in reincarnation, it certainly makes sense that should someone train from the time they are very young, then they can reach expert levels of performance early in life. The achievements of young Olympians are a case in point. Tulkus of the Future can receive a well-rounded modern education that includes reading, writing, science, and math alongside many hours a day training in attention, compassion, and enlightenment. High schools that cater to

young professional performing artists are an example of this sort of dual-education. Intensive contemplative training could be conducted in preschool, day-school, and boarding school environments.

Monasteries in Thailand have long been places where the rural poor could receive a solid education (Tambiah, 2007). In a study exploring ecclesiastical education from 1870 - 1890, Pharama Prayed found that 60% of the monks that achieved the highest degrees ultimately disrobed and return to lay life, while 40% remained career monastics (Tambiah, 2007, p. 290). Many of those who disrobed found good jobs in respected government posts. A royal directive in 1989 assigned the monasteries a central role in the plan to promote primary education throughout Thailand (Tambiah, 2007). While this role has shifted with modernization, the fact remains that Thai monasteries have long promoted social mobility through education.

In the United States, with public schools mired in a slew of crises, there is growing room and a great need for educational alternatives. Demand is rising for schools to prioritize character development and social-emotional learning alongside traditional academic agendas. Alejandro Adler, a trailblazer in the field of positive education, proved that a push in this direction improved both well-being and academic outcomes, presenting an extraordinarily cost-effective method for improving school performance (Adler, 2016). Hopefully, win-win interventions like this will become more popular with time. When asked what the core of his programing boiled down to in one word, Dr. Adler replied “mindfulness” (A. Adler, personal communication, July 26, 2018). Perhaps some schools will be curious to see just how far the rabbit hole of contemplative training goes.

As monasteries train people to be adaptable, disciplined, composed, reliable, levelheaded, and emotionally intelligent, those wishing to return to lay life will find their training invaluable whatever they choose to do. Should the Monasteries of the Future simultaneously meet high academic standards, then the education would provide a lifelong boon for enrolled children, and society at large. The core challenge will be raising adequate funding to ensure this education is widely accessible and not another niche product for the wealthy.

Young adults. Monastic training could also serve as a gap year, or more, both for matriculating students and recent college graduates. Young people filled to the brim with academic learning could benefit from an immersion in contemplative training, with Monasteries of the Future perhaps becoming competitive alternatives to postgraduate programs such as Teach for America. Convincing both students and parents of the value of contemplative education would be crucial to making this possibility real, as would providing loan deferment options for students in need. For young people not continuing with higher education, Monasteries of the Future could serve as a punctuation mark between childhood and adulthood. Imagine a Monastic Corps to complement programs like the Peace Corps, Marine Corps, and AmeriCorps.

Adults. Full-time monastic training may also be beneficial for people in the midst of career changes or other major life shifts. When children leave home or a job ends might be good times for residencies in contemplative communities. Certain Monasteries of the Future may be attractive to people approaching retirement. Some of these people would ultimately return to lay life, while others may become career monks, taking on roles as teachers, administrators, or operations personnel within the monasteries themselves.

Veterans. Robert Thurman (1999) paints monasticism as a foil to militarism, and he notes how Buddhist monastic culture developed methods for demilitarizing the warrior class (Thurman, 1999, p. 119). Today, soldiers often return home, deeply traumatized, unable to move into the next chapter of life (“Mental Health Needs of Veterans,” n.d.). Might these veterans be served by the techniques of demilitarization used in ancient Indian Buddhism? Perhaps some of the more than \$7 billion (Kim, 2015) spent annually on mental health care for veterans could be funneled into such an experiment.

Incarcerated populations. Another point of entry for contemplative education could be the prison system. What if incarcerated people could opt to participate in experimental, alternative sentencing programs by voluntarily committing themselves to monastic training? The United States has the second highest per capita incarceration rate in the world, with 2.3 million individuals behind bars (White, 2015) and the rate of recidivism is sky-high with nearly 75% of released prisoners rearrested within five years (Durose, Cooper, & Snyder, 2014). People are incarcerated at the astronomical average rate of \$31,286 per year (Santora, 2013). Compounding this problem, the United States supports a private prison industry that grossed \$4.8 billion in 2014 (White, 2015). Alternatives to the current system are desperately needed on both moral and financial grounds.

The litany of abuses in both public and private prisons is shocking, including egregious living conditions, rampant violence, and unpaid labour akin to modern slavery. Perhaps it is time to create a non-profit, rehabilitative prison system that reconsiders what a correctional system can achieve. Such a system could train inmates in the core skills of attention, compassion, and enlightenment allowing individuals the chance to utilize their sentence to achieve profound

personal maturation. Classical figures like Āṅgulimāla (Thera & Hecker, 2003), a disciple of the Buddha, and Milarepa (Heruka, 2010), perhaps the greatest yogi Tibet has ever known, embody such transformation. Both were murderers who went on to become renowned and beloved figures of Buddhist lore.

This endeavor could start small with pilot programs and if effective grow overtime into a major force. The program could be built on a code of discipline that included zero-tolerance policies for violence, harassment, and noncompliance, ensuring safety and creating the conditions necessary for proper practice. While the challenges of crafting such a program are immense, the potential benefits are too. Imagine transforming one of the darkest and most regressive systems in the United States into a wellspring of redemption, hope, and inspiration.

Overall Diversity. This range of potential demographics provides a glimpse of the far-reaching possibilities for Monasteries of the Future. With a universal rigor as the common denominator, each monastery will adjust to fit the population it serves with differences in focus and tenor. For example, certain Monasteries of the Future might be oriented more towards physical, artistic, or academic development. Most centers will be small—designed to serve a few dozen people under the guidance of a single elite monk. Others will have as many as a few hundred elite monks under one roof teaching thousands of trainees. Unlike traditional monastic orders that often required lifetime commitments, this new model will allow people to enter, leave, and re-enter over the course of their lifespan. In Thailand this model exists already. Young Thai men often ordain for brief periods and are considered by many immature and unfit for marriage without this training (Cook, 2010, pg. 6).

Monasteries of the Future will be committed to disseminating contemplative practices at all levels, elite to moderate. Monasteries of the Future will also forge strategic partnerships with outside institutions, teaching and consulting at schools, hospitals, and businesses. Engagements might include eight-week training courses, short daily meditations, strategic planning, and curriculum development. Some of this work will be offered as a donation, while some will generate income for the monasteries.

More Logistics: A Road Map with Blanks

Contemplative Practice Adapts to Various Cultures

For thousands of years, both European and Asian monasteries adapted to different cultures, creating unique methods of training. These adaptations accounted for local traditions, beliefs, norms, sensibilities, geographies, climates, economies, political structures, languages, and technology.

The vast range of expressions of Buddhism, from the orange robes of India to the grey robes of Korea, is a paragon of contemplative diversity. An Indian Buddhism in which monks were forbidden to do work such as cooking, digging in the earth or handling money (Ariyesako, 1998), later transformed into a Ch'an Buddhism in China in which a "day without work is a day without food" (Heine, & Wright, 2010). The aesthetic of bright colors and elaborate patterns of Tibetan Buddhist tapestries and monasteries, with a dense cacophony of demons and spirits that inspired peoples from the open expanses of Tibet, contrasts with the stripped-down minimalism and muted tones of Japanese monasteries, where people perhaps sought refuge from an increasingly urbanized and crowded world. A foundation of reverence in Thailand and its abundance of deep wilderness in the northeast spawned a revival movement, the Thai Forest

Tradition, that revitalized the practice tradition at the turn of the last century (Thanissaro, 1999). The protected laboratory of the high mountains of Tibet, replete with caves perfect for solitary retreat, birthed over a thousand years of contemplative evolution and development (Thurman, 1999). The monastic Buddhist culture housed in a classical Indian society, with its highly refined intellectual and artistic pursuits, provided fertile ground for the development of Nalanda, one of the most impressive monastic universities ever constructed (Asher, 2015).

Each of these exemplifies contemplative evolution. Today, people are just beginning to explore what a modern monasticism might look like, to establish a method of training that works for modern people, for this century, for a global world.

Why Call Them “Monasteries”?

Why call these institutions “monasteries” when a more neutral term, such as “academy” could suffice? While Monasteries of the Future share much in common with academies, the word academy is too dry, too linked with intellectual pursuits, too divorced from the ethics and embodiment that are central to monasteries. Monasteries house and sustain monks. Historically, they were religious in orientation with Buddhists, Christians, Hindus, and Taoists all developing sprawling monastic orders, each order knit together by various rules and doctrines (Monasteries, n.d.). These rules are often elaborate, covering a monk’s relationship to sexuality, property ownership, clothing, travel, work, study, communication, food, intoxicants, and technology.

In spite of differences, such as the fact that Monasteries of the Future can be either religious or secular, while traditional monasteries were religious, Monasteries of the Future share important qualities with traditional monasteries. For example, Monasteries of the Future delineate a set of rules for trainees, designed to align all elements of the trainees’ lifestyle with

the goal of developing contemplative prowess. The sense of totalness associated with monastic discipline and rigor will be central to the ethos and structure of Monasteries of the Future. The strict and demanding schedule at the Monastic Academy swallows trainees, yoking their life to something beyond desire and survival. Shinzen Young, an extraordinary former monk devoted to systematizing and synthesizing contemplative traditions, defined a monastery as a “feedback device” that encourages people to transcend attachment, a vice that is dull, annoying, constrained, perhaps even miserable for untrained minds, but becomes an efficient teaching tool and a source of great joy and meaning for those committed to practice (Young, S., personal communication, June 6, 2018). This definition encompasses organizations both religious and secular in orientation.

Historically, monastic orders successfully carved out an alternative social space, both a part of and apart from the society at-large. Robert Thurman describes traditional Buddhist monasteries as a “protected community within society that enabled individuals to develop an extraordinary standard of ethical, intellectual, and religious life” (Thurman, 199, p. 101). This sense of a part of and apart from the world will be a core characteristic of Monasteries of the Future. The fundamental activity pursued in this alternate social reality will be “complete self-transformation and complete world-transformation” (Thurman, 1983, p. 19), i.e. the development of contemplative skills in the context of service, an activity that has scant few modern institutions with rigorous structures to support such a goal.

Gaining Power

The spread of Buddhist monasteries, or Sangha, across India in the millennium following the Buddha’s life is a case study in the creation of a widespread alternative social space. Despite

the rise and fall of dynasties, expansion and contraction of kingdoms, and a constant reshuffling of power, Buddhist monasteries nevertheless spread consistently and virtually uninterrupted until the 2nd century, a seven hundred year run (Dutt, 2015, p. 116). It was not until Muslim invasions starting in the 12th century that Buddhism was largely expunged from India. As the Vinaya, the rules governing Buddhist monks, developed to maturity in the centuries after the Buddha's death around 500 BCE, the Sangha came into a more formal relationship with the state (Dutt, 2015, p. 80). This guaranteed the Sangha a certain level of protection, non-interference, and, at times, patronage in accordance with the monarch's duty to support the various entities that composed Indian society.

In Thailand, another country that saw the meteoric rise of Buddhist monasteries, the kingship became deeply intertwined with the Buddhist monastic order starting as early as the 13th century (Tambiah, 2007). Thai kings came to rely on the support of the Sangha to legitimate their rule and were in turn expected to protect and promote the Sangha. Burma, Thailand, and Sri Lanka have each in their own way over time dealt with this intricate relationship between polity and ecclesiastical power which remains an ongoing dance to this day.

In exploring the historical ascent and decline of the Sangha across Asia as well as Christian monasteries in Europe, there are lessons for Monasteries of the Future about how they might spread, what challenges they might face, and how to overcome them. Monasteries of the Future must, like monasteries of the past, contend with the powers that be if they are to successfully carve out an alternate social reality. Today this means navigating amongst nation states, democratic, autocratic, and plutocratic; corporations; universities; and established religions.

The Dalai Lama, who is arguably more influential in exile than he would have been had Tibet retained its sovereignty, sets a striking example of how to forge strategic partnerships across these various sectors. He has built friendships with democracies such as the United States, from whom he received the congressional gold medal, and India, now home to the exiled Tibetan population; universities around the world, as demonstrated by the growing respect afforded to the Mind and Life Dialogues specifically and contemplative science generally; and religions, as evidenced in his relationship with Archbishop Desmond Tutu and and Father Thomas Merton. Where he is stymied, for example, in negotiations with China, he takes the high ground. He refuses to villainize anyone, a strategy both compassionate and pragmatic. His ability to make traditional ideas palatable to modern people, such as his appeal for a secular ethics built on compassion (Dalai Lama, 1999), is an example of how Monasteries of the Future might learn to articulate their vision in culturally appropriate ways that garner support from modern society and open doors for a variety of partnerships while disarming potential adversaries.

Financing Monasteries of the Future

In the somewhat democratic West, where money reigns supreme, Monasteries of the Future primarily face financial hurdles, i.e. how to secure the funds necessary to pay for the buildings, land, food, and staff required for their educational programs. In Asia, benefactors and lay people have long supported monasteries by providing clothing, food, land, shelter, and medicine to monastics (Dutt, 2015). Monasteries of the Future must create a modern form of this kind of patronage. Attracting smaller donations from many individuals, establishing relationships with major donors equipped with vast resources, creating a powerful alumni network, securing grants, and earning government funding are all methods to pursue. Monasteries of the Future can

also develop self-sustaining income sources, much as traditional monasteries supported themselves through real estate acquisition, farming (Monastery, n.d.), and mercantile production (Davidson, 2015).

A year living and working at the Monastic Academy, one of a handful of existing prototypes, gave me an intimate look at how just over a million dollars, when handled carefully, can support the birth of a living, breathing Monastery of the Future. Based on first hand experience fundraising for the Monastic Academy, studying the finances of a half dozen other centers, and following a variety of contemplative initiatives over the last decade, I have estimated the cost of a small, fully-functioning Monastery of the Future. This monastery would have at least one elite monk teaching and up to two dozen students living and training full-time. Acquisition of land and the construction of necessary facilities could run from ~\$1 million to ~\$10 million, with annual operating costs from ~\$200,000 to ~\$500,000.

Thus, for \$100 million, fifty prototype Monasteries of the Future could be established and sustained for five years. In that time, hundreds of people could be guided to extraordinary levels of development while providing thousands more with important, albeit less thorough training. This initial investment would provide a strong foundation from which to expand the network to include hundreds of centers over the coming decades.

While \$100 million may sound like a great deal of money for such an initiative, in the private sector that amounts to \$20 million less than the most expensive home in Los Angeles (Chiland, 2017); in the governmental sector, it adds up to 0.0002% of the United States “defense” budget (Military budget of the United States, n.d.); and in the non-profit world it is approximately the same cost as the University of Cincinnati’s new athletic facilities (Zirm,

2014), or Yale's new student center (Sleeper, 2018). With ingenuity and grit on the part of Monasteries of the Future, and generosity and foresight amongst their funders, raising \$100 million is an initial hurdle to cross and a plausible target to reach.

Collaborate and Compete: Structure of a Network

Monasteries of the Future will not stand alone; they will be connected as a network of centers that collaborate and compete, producing experts and knowledge, establishing a foundation of integrity and driving innovation in the contemplative field.

Contemplative Science Drives Innovation

Partnerships like those between Matthieu Ricard, a renowned Buddhist monk, and Tania Singer, a world class neuroscientist, who worked together to untangle the constructs of empathy and compassion, demonstrate the immense power and potency that is unleashed when contemplatives and scientists meet on equal footing (Kupferschmidt, 2013). By studying people exquisitely trained in attention, compassion, and enlightenment, and by using the populations of Monasteries of the Future as research subjects and intellectual partners, scientists could learn more about brain structures and processes, while contemplatives could develop evermore effective training techniques.

Ancient mind science involved carefully testing hypotheses across networks of contemplatives (Wallace, 2009). Over time this form of experimentation led to impressive repositories of both verified and debunked claims. These claims included best training practices, ontological conclusions about the nature of consciousness, and discoveries about happiness and its roots (Wallace, 2009). Certain texts, such as Patañjali's (2009) *Yoga Sutra's*; Tsongkhapa's

(2002) *The Great Treatise on the Stages of the Path to Enlightenment*; and Buddhaghosa's (2010) *The Path of Purification*, are classics that document the experiments of many generations of contemplatives. Enormous collaborative work went into creating these texts and testing them anew across the generations. Validating this form of science are the shared experiences of mystics across vastly different cultures and geographies, who have confirmed common conclusions on the importance of developing compassion, attentional skills, gratitude, and an awareness of interconnection (Goldstein, 2002).

Just as in physics, each person's opinion is not equally valid, so too in the contemplative field people speak with greater or lesser authority. Rigorous training, deep experience, and collaborative findings among living practitioners and across generations yields a worthwhile perspective. Too often the modern spiritual world has sacrificed credibility by failing to acknowledge this basic fact and instead assigning validity based on who people are drawn to, like, or enjoy.

A legitimate mind science drives innovation as successive generations build on past findings. This is similar to the way that universities collaborate and compete to move science forward. The historical Buddha created masterful contributions to philosophy, psychology, and human potential on the foundation of existing contemplative technologies. When he left home to find a happiness beyond conditions, he already had powerful tools available to him including asceticism and techniques for refining attention, both of which he mastered under the tutelage of contemplative adepts of his day. The opportunity to consolidate knowledge, test theories, and create contemplative technological breakthroughs moves forward the science of happiness and well-being.

While modern Western science largely relies on third-person methodologies, first-person methodologies are foundational to ancient mind sciences, a field of study that valued direct experience of mental states. The Dalai Lama, a man known to be generous with praise and reluctant to criticize, did not mince his words at the Mind Science of Reality conference at the University of Pisa when he said that the “science of mind...I may say, (I apologize to you) Western psychology, compared to ancient Indian psychology, looks like kindergarten level” (Dalai Lama, 2017). This assertion of confidence in the value of first-person methodologies in no way contradicts the value or validity of modern Western science.

Varela and Shear (1999) acknowledge the strengths and weaknesses of both third and first-person methodologies, and argue for building links between the different approaches in order to advance the science of consciousness. A healthy balance of confidence and humility among modern contemplatives and scientists could create fertile ground for the marriage of these powerful methodologies and the birth of “contemplative science”(Wallace, 2009, p.1). Monasteries of the Future would be perfect homes for the emergence of this field.

Partnership with Positive Psychology

In the 1990s a new movement in psychology emerged with the work of Martin Seligman, Mihaly Csikszentmihalyi, and Barbara Fredrickson, among others (Peterson, 2006). Building on earlier movements, including humanistic psychology, transpersonal psychology, and the human potential movement, positive psychology set its sights on what goes right with humans. Positive psychology, unlike some of its predecessors, was from its inception committed to maintaining a close relationship with empirical research (Peterson, 2006). This created a base within science from which to launch campaigns to explore the vast and largely unexplored domain of human

flourishing, positioning positive psychology to figure prominently in the natural and powerful cross-pollination between contemplatives and various branches of science.

What is it that nourishes, that sustains, that inspires? What is it that creates the conditions for extraordinary levels of happiness, generosity, and connection? How can a sense of meaning and purpose fuel one's life? How are relationships with others responsible for generating and sustaining happiness, and how can these relationships be strengthened? How can we savor and appreciate our lives? How can resilience be cultivated? What role do virtues like gratitude, forgiveness, joy, and curiosity have in our world? How are these various qualities distributed amongst populations? How are they created? How are they sustained? What pragmatic benefits or drawbacks do they have? These vital questions finally had a home under the large tent of positive psychology—the empirical science of human flourishing.

In an early attempt to define the scope of this burgeoning field, Seligman (2011) proposed five areas for consideration when he introduced the PERMA model of well-being. Monasteries of the Future could be institutions that further the understanding of every element of this model. Positive emotions are cultivated through a variety of contemplative techniques, engagement is specifically trained with attentional development, compassion is arguably the most important quality in relationships, meaning is the core pillar of monastic life, and the cognitive and emotional tools of contemplative traditions could support making people more effective and thus more accomplished.

Monasteries of the Future can serve as outposts positioned to advance the field of positive psychology, centers where researchers can hone theories such as Fredrickson's (2001) Broaden and Build theory, which explores the role of positive emotions and relationships in improved

cognition and well-being; Peterson and Seligman's (2004) cataloging and systematizing of character strengths and virtues; and Ryan and Deci's (2001) exploration of the distinctions between eudaemonic and hedonic flourishing. In addition to refining old theories, new ones could also be hatched. For contemplatives, brain imaging, psychometric assessments, physiological monitoring, and neuro and biofeedback could provide new tangible measures of contemplative attainment. These measures could improve training techniques and provide new evidence for the value of contemplative training.

Balancing Rigor and Innovation

Many of the most rigorous forms of meditation are practiced in communities that adopted their entire approach from already existing monastic models. Abhayagiri in Northern California is a monastery that uses forms adopted from a monasticism practiced in Thailand in the early 20th century. While this works for some people, for many it does not. On the other hand, those who eagerly espouse innovation in the field often do so at the expense of rigor. Monasteries of the Future will have to encourage innovation without losing rigor. This will be a delicate balancing act.

Those who trained in Buddhism traditionally were from nomadic and agrarian cultures. Their minds were likely far less discursive than the minds of people raised on social media, newspapers, and iPhones. Monasteries of the Future will need to account for the unique psychology of modern people, which will require innovation without losing sight of the deepest developmental possibilities. This challenge will be best addressed with many centers running concurrent experiments and sharing the results of their work.

Accountability

Collaboration and competition among centers could also promote accountability, decrease ethical violations, eradicate magical thinking, and combat other pathologies of modern spirituality. Just as universities are often forced by fierce competition to adopt policies on sustainability, sexual harassment, divestment from fossil fuels, and other policies they might otherwise resist, so too could Monasteries of the Future work to raise their standards together.

Since its widespread introduction to Western culture in the 1960s, the contemplative field has been implicated in many scandals involving sexual, physical, psychological, and financial abuse. It seems this exploitation was inevitable as teachers gained audiences and power through charisma and mystique, rather than as a result of mature contemplative development as recognized by consensus amongst experts. Masses of people unqualified to judge the merits of their teachers were left vulnerable. They were preyed upon by half-baked contemplatives, charlatans, and crooks. Monasteries of the Future will help to remedy this by establishing standards and accountability in the field.

While early Buddhism took a progressive approach by including women, many communities across Asia and in the United States have yet to introduce true gender equality—a continued blemish on these communities and on the field at large (“Gender inequality in Buddhism,” 2011). Institutions unable to achieve the basic and vital goal of gender equality cannot be called “Monasteries of the Future,” as to do so would degrade the name. To be a highly progressive force in society, Monasteries of the Future must establish clear leadership in regard to including and promoting all marginalized genders.

Further Benefits of Monasteries of the Future

Teachers and Guides

Additional diverse and hard to predict benefits may accrue from a well-established network of monasteries. For example, monasteries have long created exceptional teachers and guides. As teachers, monks shared, explained, and expounded on crucial teachings and provided practical advice on the technical aspects of meditation. Monks also offered moral instruction and uplift to their communities (Dutt, 2015). They took on other roles too, supporting, comforting, and guiding those who come to them with life questions, problems, and aspirations (Kornfield, 2009).

Monasteries have developed and spread innovations in contemplative practice. A thousand years of monastic discipline in Myanmar combined with the evolving social reality in colonial and post-colonial Burma birthed a host of modern teachers, (Ledi Sayadaw, Mingun Sayadaw, Mahasi Sayedaw and U Ba Khin among them). These teachers reformatted and refined the tradition, birthing a populist movement in meditation in Myanmar during the 20th century (Braun, 2014). This technique was in turn studied and adapted by a few young Americans, who would ultimately usher in the modern mindfulness movement that has since reached millions worldwide.

Monks as Symbols of a Happiness Beyond Conditions

Furthermore, monastics and yogis “[put] the demands of relative reality into the context of transcendence” (Thurman, 1999, p. 93). Lay people might not themselves be committed to full-time study and practice, but watching the monks walk through the streets reminds people of another possibility, a way for them to put their lives and struggles into perspective. Finances,

status, health, and relationships are important concerns, but of course there are limits to how much people can improve and control these external circumstances. Finding peace and meaning independent of circumstance is an important possibility that the monks' presence can remind lay people of.

As a culture of materialism grows, a countervailing force is needed to ground people in a sane and sustainable approach to happiness. Modern monks may provide an antidote to materialism and the hedonic treadmill. At the Monastic Academy in Vermont, monks live simple lives. Their food is healthy and filling, basic and plant-based, costing only a few dollars a day. Sometimes as many as thirty people live in a house that a wealthy family of four might occupy alone. Resources such as cars, computers, a washer and dryer and a kitchen are shared.

Also stemming from monastic life is something beyond a reduced ecological footprint. As monasteries are sustained by donations, every watt of electricity and every scrap of food is honored. A sacred trust exists between monk and patron, generating a sense of responsibility rather than entitlement regarding all forms of consumption. Despite a limited material life, many monastics exude an unusual level of joy and satisfaction, demonstrating the hollowness of acquisition and consumption as means to fulfillment.

Gaining the Ear of Kings

From time to time, contemplatives of the past touched the hearts of rulers and transformed the political and economic realities of their times. King Ashoka, an Indian king renowned for his brutality, converted to Buddhism in midlife, renounced most forms of violence, and established new norms for health care, criminal justice, education, and the humane treatment of animals (Thurman, 1999, pg. 113). Charles Allen, in his historical treatment of King Ashoka's

reign, remarks that “Emperor Ashoka and his ministers presided over an administration both efficient and benevolent to a degree rarely seen before or since” (Allen, 2012, p. 388). Later, in India, Nāgārjuna, a great philosopher, sage, yogi, and the abbot of Nalanda, a powerful monastic university, became an advisor to King Udayi Shatavana, the ruler of a large swath of southern and western India (Thurman, 199, p. 166). Although only limited evidence of this kingdom survives, historical accounts suggest it was prosperous and peaceful, with great artistic and educational achievements and sprawling monasteries (Thurman, 1999, p. 169 - 170). *The Jewel Garland of Royal Counsel*, written by Nāgārjuna, recounts his teachings to King Udayi on social policy which helped create a powerful and beneficent reign (Thurman, 1986).

Following the introduction of Buddhism to Tibet in the 8th century Tibetan nobles and kings sent missions to India to acquire contemplative teachings and teachers (Thurman, 1999, p. 225). Over time, contemplative practice became so thoroughly integrated into society that in 1642 Tibet made the radical decision to hand the highest political authority over to a monk, Losang Gyatso, the 5th Dalai Lama (Thurman, 1999, p. 248). The institution of the Dalai Lama remains to this day, and is a rare but inspiring example of deeply trained contemplatives not only gaining the ear of kings, but themselves becoming kings.

Modern-day politicians and business executives determine the fate of societies worldwide, as well as the planet itself. All living beings would benefit from these individuals seeking wise and compassionate counsel. Elite monks could help fulfill this need. In describing the role of monastics, Nāgārjuna said

they must thus be intensely critical of all falsehood, pretense, delusion, sham. Therefore, their sayings and writings must be so ruthlessly clear and straightforward, that inferior

persons, elite members as well as kings, must be terrified of being exposed in their pretenses and faults, hence inspired themselves to live and act transcendent. (Thurman 1983, p. 44)

Contemplative adepts with impeccable veracity and unwavering compassion could help create a healthy social order by holding those with the most power to high standards.

Not a Panacea

While there are countless benefits of building Monasteries of the Future, these institutions are in no way panaceas. World War II saw Zen Buddhism become a tool to help promote a brutal empire (Victoria, 2006), while Thai Buddhism has been beset with scandals and shady political dealings (Lefevre & Niyomyat 2016), and despite the presence of over 500,000 monks in Myanmar, the massacre of Rohingya Muslims occurred virtually unchallenged (Wade, 2017). Social critic Slavoj Zizek (2003) even goes so far as to declare that despite seeming to challenge global capitalism, western Buddhism in fact acts as its “perfect ideological supplement” (p. 12), allowing people to feel removed from an intolerably destructive system while nevertheless participating fully in it.

Additionally, many important practical concerns cannot be addressed by monasteries alone. Despite its great inner science, Tibet lacked the capacity to check the horror of the Chinese invasion and genocide, and classical India, with its fabled monastic networks, fell to violent invasion. The need for strong democracies, rule of law, excellent secular education, health care, environmental protection and regeneration, and traditional aid work in its great variety of expressions all remain vital concerns for any healthy society. Monasteries of the Future could support and inform all institutions of a society, but will not supplant them.

Conclusion

Literacy is an example of a skill that changes a person's relationship to everything, including skill acquisition itself. Modern-day society's current contemplative illiteracy - lack of contemplative skill, training, and understanding - is comparable to ages past, when only a handful of priests and gentry could read. Indeed, widespread training in attention, compassion, and enlightenment could create an impact as transformative as the impact that resulted from widespread literacy. Imagine a world where it is normal for people to generate bliss on command from the power of their concentration alone, where those same people also have an overflowing compassion that directs their every action and decision, and where these individuals apply their laser-like attention to anything they set their minds to. Such a world is possible.

In 1969 the Apollo Guidance Computer (AGC), a 70 pound marvel, helped Apollo 11 land safely on the moon ("Apollo Guidance Computer," n.d.). Today's iPhones are thousands of times more powerful than that original AGC. Most scientists would have laughed if someone had told them in 1969 what we would now carry in our pockets. The inner technologies that we stand to unleash with Monasteries of the Future could be equally extraordinary and difficult to imagine at this time. Developing contemplative skills and technology beyond "kindergarten level" (Dalai Lama, 2017) could radically change our world with vast implications for both remediating pathology and cultivating human excellence.

By applying the science of expert skill development to the cultivation of core virtues and skills, Monasteries of the Future can recast once seemingly fixed traits as pliable developmental possibilities. By systematizing this training and weaving people together in a self-correcting dialectic driven by collaboration and competition, Monasteries of the Future will create

contemplative adepts who probe the upper limits of not only attention, compassion, and enlightenment, but also joy, peace, meaning, gratitude, love, and forgiveness. In partnership with scientists, Monasteries of the Future will help forge a new paradigm for what constitutes the good life, undermining many of the destructive tendencies of our modern world. On the front lines of revealing what inner skills are trainable, how to train them, and how trainable they are, Monasteries of the Future will help to answer these pressing and complex questions, questions that in a world of seven billion people, have become questions of survival.

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