The Journal of Contemplative Inquiry

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Introduction

This special edition of the Journal of Contemplative Inquiry is based on a conference that Arthur Zajonc and I organized at Amherst College entitled, "Across the Disciplines: Contemplative Pedagogy in Higher Education." The papers represent the work of scholars and teachers from diverse subjects—chemistry, law, music, religion, economics, education, information science, and environmental policy—and explain and demonstrate the use of contemplative approaches in their diverse courses. They provide rich examples of the many backgrounds and contexts from which the practices and approaches are drawn and illustrate broad intentions and methods of their teaching.

So that you can get a clear idea of how they are using these methods, most papers contain specific examples of the exercises and practices used in the many courses reviewed. We hope that these examples will lead to new variations within your own teaching. Though they sometimes sound straightforward, the use of these practices can pose their own difficulties. To address this, each author reflects on the challenges and potential pitfalls of their approaches.

I hope that this group of papers provides both the inspiration and information to foster the use of contemplative inquiry in your own courses and research, leading to new and innovative frontiers within your own teaching and learning.

Daniel Barbezat

Legal Education as Contemplative Inquiry: An Integrative Approach to Legal Education, Law Practice, and the Substance of the Law We Make

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In this paper, the author describes the advent and increasing prevalence of contemplative pedagogy within legal education and discusses some of the ways that contemplative approaches to legal education and law practice are infusing the legal system with a new consciousness, one that may amount to a new birth of freedom by and through law, and through reimagining education—for lawyers, and for us all.

For more than a century, since the legal academy superseded local apprenticeships as the means of gatekeeping and training new entrants to the profession, law schools have had the special responsibility of educating America's lawyers. Like other institutions dedicated to educating professionals, law schools are tasked with providing substantive knowledge, skill development and training in ethics and values. They have developed into formidable resources for individuals and communities across the country. And they have never been more roundly seen as failing to provide the resources and results that their students and our communities need most than right now.

Legal education today is facing a wide range of challenges which together have reached, in the eyes of many, the level of crisis. The challenges not only raise important questions and stinging criticisms about traditional legal education, law and practice, but from many quarters also include larger questions about the role of lawyers in an ever more diverse society. As I've discussed more fully in previous essays, these challenges have arisen from both within and without. They have created within legal education a desire for experimentation and the will to change.

Against this backdrop, and consistent with the broader movement for contemplative approaches to teaching and learning, a movement for contemplative legal education and law practice has emerged. So far, it has brought about a range of classes and co-curricular trainings and workshops at law schools across the

country. It has led to the opening of two centers of mindfulness in law, and the founding of a sub-section on Mindfulness within the Association of American Law Schools, the organizing body of accredited law schools nationwide. Still in its early stages, this movement is already changing legal education and law practice in profound ways. In the coming years, we can expect more evidence that law itself is changing in response.

Despite its being at the very earliest stages of aborning, the term I've coined to refer to and describe these developments is "contemplative law." But many may wonder: just what does this new term mean, and how is it showing up in the world today? In the balance of this paper, I discuss some key features of contemplative law that appear to be emerging. I highlight how these features meet the most well-founded criticisms of legal education from a range of different perspectives. I show how these approaches deepen our students' engagement with the substance of legal education while at the same time assisting them in developing much-needed skills and clarifying values in ways that lead to the formation of lawyers who are more holistically capable of serving the needs of 21st-century America. By the end, I hope to show that these developments are part of a larger movement to transform legal education, a wave of change that portends a new birth of education for a life in law—making it more effective, more inclusive, and more liberating for all of us.

Why a Contemplative Approach to Law and Legal Education Now?

Like it or not, as citizens and vulnerable to an increasingly complex, increasingly powerful international and indeed supranational political economy, we all depend on lawyers. American society depends upon a professional class of expert lifelong learners, scholars, teachers, and advocates to assist in the maintenance of the rule of law in our democratic system. Given the privilege and responsibility of articulating "individual," "civil" and "human" rights and responsibilities across multiple layers of governance, the legal system itself is a good deal responsible for shaping our limited sense of our relations and responsibilities to one another (Gabel, 1984). At the same time, deep economic and social expectancies depend on the law as a stabilizing institution. Hence, it is nearly always under simultaneous pressures to change and to remain the same.

Notwithstanding the limitations inherent in a system of laws intentionally shaped to fit comfortably within and stabilize particular presently-dominant sociohistorical systems, enlisting law in the service of positive social change is both an ongoing reality and an ever-present possibility. Despite its tendencies toward maintenance of the status quo, legal history is replete with evidence of the role that legal scholars, in conjunction with other change agents, have played in influencing what Oliver Wendell Holmes (1897) famously called "the path of the law." Hence, legal educators see the opportunities inherent in our work as teachers to shape its contours and, where desired, to do what we might to hasten its success.

Of no small moment in all of this is the experience of legal education itself. Legal educators are the first "face" of the system that new lawyers see. Each year, tens of thousands of students enter law school to begin the arduous process of socialization and education that comprises traditional legal education. It wasn't always that way. For centuries before that, lawyers primarily received their education through the process of apprenticeship to established lawyers, "reading the law" and working in specific communities to develop the knowledge, skills, and values necessary to the service of the role of counselor, advocate, and, when called upon, wise leader among the powerful. In earlier days, then, lawyers developed their skills in specific relationship with an expert mentor working in a community. Moreover, training in legal ethics reinforced more general ethical commitments supported by religious and moral precepts shared by the broader culture. And, although access was limited to a relatively small and privileged subsection of the population, for some time lawyers were trained to view their work as more of a service and calling than a business and career.

Whatever the merits or demerits of that old system, it has long since faded and a new wave of change in legal education is well underway. As American society becomes increasingly diverse and our politics and culture more polarized, our communities are increasingly fragmented. The technological revolution is creating ever new ways of performing legal work, and the advent of a global economy is upending the business model that was the old system's underpinning. Taken together, these changes portend many more: the old models for educating lawyers are giving way to as-yet-not-fully-formed but undoubtedly new models. Already, students rightly expect something more than the traditional lectures and ever-increasing debt loads, while employers are demanding fewer, but more "practice-ready," graduates. In addition to training in traditional knowledge and lawyering skills (legal analysis, advocacy, and so on), students and potential employers and clients alike are asking for lawyers with a greater range of conflict management and problem-solving skills. The demand is on the rise for lawyers with better relational and emotional awareness, sound peacemaking skills, and the inner resources and character upon which truly wise counsel rest. With these changes, demands for alternative forms of legal education are increasing, and new opportunities for reshaping legal education continue to arise.

For those analysts of law and legal education familiar with the critical legal studies tradition, these changes are not entirely surprising. Some of the contemporary pressures and demands for change dovetail in sometimes surprising ways with criticisms that have been raised from the critical legal studies corner for more than a generation, since law schools first began to be open to students from a broader cross-section of the population. Law schools were not all established by, staffed by, developed for, and attended by white men, but up until a generation ago, indeed, the vast majority were. They were focused on providing the training

necessary to supply the ever-expanding demand for lawyers to assist in meeting the legal needs of actors in a the vast array of public and private settings comprising the hierarchically-structured, modern political economy. And they were committed to providing lawyers who would, primarily, assist in maintaining the status quo. The changes afoot in legal education today are coming as a result of structural changes to the business of law, but they may well lead to reforms which mirror those long sought by progressive, "outsider" legal critics (i.e. feminist critical theorists, critical race theorists, "Queer Crits" and so on) as well.

In short, despite the pains of the dislocations already accompanying change, some would argue that law schools are now being called upon to become what the American Bar Association (2012) has long assured the public that they already were: institutions "providing educational programs that ensure that its graduates understand their ethical responsibilities as representatives of clients, officers of the courts, and public citizens responsible for the quality and availability of justice" (p. ix). They are being called upon to deliver a more 21st-century, student- and client-centered education, appropriate to the particular challenges facing our diverse and transnational legal marketplace now. Contemplative practices and pedagogy are poised to become central to the processes by which law schools answer this call.

Awareness, Presence, and Wisdom: The Core Contemplative Skills for Lawyers and Their Effects

Contemplative practices take a wide variety of forms and range across a number of traditions. Yet, for all their differences and varieties, the central skill and experience at the heart of contemplative practices is awareness. The capacity to bring greater awareness to one's experience, and to focus awareness on particular aspects of experience, is what we mean by *attention*. Increasing one's capacity for open, intentional awareness—for paying attention on purpose, with intentionality, and with as little judgment as possible—is at the heart of the secular contemplative journey in the West. Hence, the incorporation of those skills and capacities across a range of appropriate locations in the legal curriculum is at the heart of contemplative legal pedagogy.

Indeed, the capacity to bring one's attention into focus is at the heart of the broader transhistorical and international movement for contemplative education. Its roots run deep. Here in the U.S., perhaps the seminal contemplative education theorem is from psychologist William James, who in 1890 sounded the call which many contemplative educators see themselves as answering today: "The faculty of bringing back a wandering attention is the root of judgment, character, and will. An education which should improve that faculty would be the education par excellence" (James, 463). While teachers across the academy have recognized the

virtue of such a faculty for true learning of all kinds, the legal academy's special responsibility for forming lawyers with ethical commitments to serve people in times of crisis renders the development of this faculty of utmost and perennial importance.

Contemplative practices help develop awareness skills, but they ultimately do much more. They assist in the development of the capacity for meta-awareness—the ability to be aware of our awareness, and thus of the capacity to "bring back a wandering attention." In the development of the knowledge, skills, and values of conflict professionals, this capacity has tremendously important implications—not merely for one's own personal or intrapersonal wellness, but, more importantly, for lawyers' capacities to work with others and on behalf of others for systemic justice.

The most salient intrapersonal manifestations of the capacity for awareness noted here appear to be the overall well-being, sense of wholeness and commitment to ethics that is known as integrity. This sense of wholeness leads one to a commitment to sound and compassionate judgment, which promotes ethical living: knowing, in a wholesome sense, right from wrong, and seeking to do what is right even when no one else is looking. Having a commitment to sound judgment and ethical living means one's contemplative awareness leads one more and more to act with the intention of maintaining movement in the direction of the right and the good. A contemplative approach to professional development makes awareness an integral part of what it means to be effective in helping people resolve conflicts with increasing wisdom.

The most salient interpersonal manifestation of the capacity for awareness in public and private life may be what many have called "presence." By *presence* I refer to the capacity to experience the intersubjective interrelationship between oneself and others, holistically and in the present moment. Here, too, presence does not mean that one is unfailingly unerring in one's interpersonal interactions. It simply means that one is attuned to the reality of the intersubjective being that arises in the company of others (compare Martin Buber [1923]).

Without a doubt, some capacities for awareness and presence are inborn in each of us. However, most of us find our capacities in this regard muted and diminished over the course of our lives, through a variety of efficient means including our conditioning by our families of origin, our cultures, our scholarly and professional training, and the demands of everyday life.

And yet the consequences of this lack of capacity for awareness-based presence are profound. Many have reported a sense of meaninglessness in their lives and work and a consequent drift toward bad judgment and unethical behavior. Perhaps more troubling, lack of presence can also blind us to one of the most pro-

found sources of long-term joy in our lives: our positive relationships with others.

These consequences are the same for all of us, but they are particularly deleterious for those whose main professional responsibilities revolve around interpersonal conflict management and leadership in often emotionally-charged contexts. It may not be surprising, then, to find that lawyers appear to be incorporating mindfulness into their educational and work lives at a rate that exceeds that of members of other professions.

Incorporating Contemplative Perspectives into Law Practice

More than 600,000 people are licensed to practice law in America. Though public sympathy for lawyers may never have been high, we live in an era in which respect for lawyers may be at its nadir. Yet the importance of lawyers in a liberal democratic society—especially in an age of increasing appeals to illiberalism antior post-democratic thought—can scarcely be overstated. In addition to helping maintain the system of rights and responsibilities at democracy's core, lawyers serve on the front lines of conflict management and resolution across a wide range of settings both public and private.

Some lawyers enter into the practice of law with some commitment to a contemplative tradition, while others are exposed to such practices later, or are encouraged to revisit them and find new relevance in them. Either way, more and more of those trained in conflict resolution and problem solving see substantive benefits in contemplative practice commitments. They are signing up for intensive training programs in mindfulness that extend over several weeks; they are attending lunchtime continuing-legal-studies presentations on the benefits of mindfulness; they are attending meditation retreats especially designed for legal professionals. This outpouring of willingness to explore the practice of mindfulness meditation indicate a hunger and thirst among lawyers for more deeply meaningful support in inhabiting, maintaining and sustaining their work-life roles. In the course of these efforts, they are normalizing inner work as a component of what it means to be an effective lawyer.

While additional research is desirable, there is no doubt that these practices are of benefit to lawyers in practice today. In an ongoing study of conflict professionals who engage in contemplative practices, evidence is emerging that lawyers experience the same sorts of benefits from contemplative practices that have been reported in research on other populations, with a particular tendency to reflect that the practices assist them in dealing with stress and handling conflict at work. And those who have begun explicitly to rely on these practices to assist them in sustainably performing their work as lawyers tend overwhelmingly to favor not only supporting lawyers in developing contemplative practice commitments on their own but incorporating these practices into legal education itself.

Incorporating Contemplative Perspectives into Legal Education

The uptake of these practices among lawyers has deepened the commitment and strengthened the courage of legal educators interested in introducing contemplative practice and pedagogy into legal education. The infusion of contemplative practices and approaches into traditional legal education has taken a variety of forms, but the most common are courses, called by various names, which introduce contemplative practices as means of assisting lawyers in developing a deeper, more meaningful sense of their professional identity and an approach to law practice with the potential for self-growth and renewal over time. These courses may focus on the development of professional identity generally, or they may assist law students in developing particular skills such as trial advocacy or facility with ethical issues, with assistance in incorporating mindfulness or contemplative awareness as they go.

In addition, more and more law schools are offering co-curricular offerings which enable students to obtain regular mindfulness-practice experience and guidance in a group setting. At the University of California, Berkeley, School of Law and the University of Miami School of Law, first-year students have the option of introductory courses in mindfulness. And Richard Reuben of the University of Missouri is spearheading the first-ever empirical study of the efficacy of such a course for students in their first year of law school.

Although more research is certainly needed, early evidence suggests that such interventions have significantly assisted law students in deepening their understanding of the course material. For example, Charlie Halpern and Emiliana Simon-Thomas (2012) reported early indications of positive effects on well-being and performance resulting from an introductory course in mindfulness at Berkeley. And interviews and reflective essays from my own law students report similar effects.

In addition to general "mindfulness and law" offerings, efforts have been made to incorporate mindfulness into a broad range of courses across the law school curriculum. So far, this has taken place in electives, such as trial advocacy and courses on professional identity development, but core courses such as Torts and Property Law have also been sites for the introduction of mindfulness.

An example from my own work is my course on Intro to Race and Law. In it, I incorporate a number of traditional and contemporary contemplative practices: mindfulness meditation, contemplative writing, contemplative storytelling, and mindful communication exercises. I instruct students in the Western mindfulness meditation tradition developed by Jon Kabat-Zinn (1990), describe its benefits, and incorporate guided meditations or moments of silence into the class discussions. Students are given weekly journal assignments and instructions on mindful, contemplative writing, and they are encouraged to experiment with such practic-

es in their journaling, as well as in the early stages of formulating their thoughts on research interests and beginning to write their research papers.

In addition, students are introduced to contemplative practice not only as a practice supporting their *intellectual* development—i.e., assisting them in knowing what they know and how they know it—but to support their *social and emotional* development as well. Because learning is inherently not only an intellectual but also a social and emotional process, these practices assist students in teaching and learning about race as lived experience known in some way by each of us, experience that is often constructed by law and interactions with legal authority. Learning in these ways is profoundly rigorous and thorough. Contemplative practice and pedagogy serve to assist students in a holistic process of re-membering or recollecting the "racialized" self as the one who knows, or, in this case, *the one who knows what race is, feels like, and looks like, from within the experience of it*, a process that, for many, is significantly deepened by this array of contemplative practices.

For example, the practice of contemplative storytelling invites students to "tell one of the stories that stand out for them most" around racial experience, such as how they first came to know the meaning of race, an incident in which they learned racial views from a family member, and so on. They are invited to tell the story first in writing, in a journal reflection; then to share the story in a dyad or small group setting; and finally, time permitting and as desired, to the whole class. In the process, they each examine their lives from deeper and more-varied-than-usual perspectives—through dialogic processes, in which students take turns mindfully listening and speaking, and through examining the stories by which they construct a sense of themselves and a felt understanding of "race" and how it is made and remade in the world, by writing about these stories again and again.

Through these processes, students learn and grow. They learn to articulate some of the meanings and constructions of "race" with nuance appropriate to their own experiences and newly deepened knowledge of it. They grow in their capacity not only to develop trust in their own and others' capacities to speak and listen from the heart, but also to co-create communities capable of making such connections together. They experience not only the connective power of vulnerability but also the reconstructive power of owning their own stories.

My ultimate objective is consistent with the research on good teaching: to create rigorous, student-centered, identity-safe learning communities in which every student can thrive and, collectively, each class learns together (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010). Such communities depend on the presence of teachers committed to ongoing self-reflection, a commitment enhanced by contemplative practice commitments. They depend on the presence of teachers with respect and concern for every student, commitments enhanced by the sense of awe and awareness of the vast potential and value of all others that is the frequent

consequence of contemplative practice. My belief is that our classroom communities can be all the more effective where contemplative practices are explicitly, thoughtfully, and intentionally introduced in appropriate ways to enhance student learning. Thus, I seek to develop an approach to legal pedagogy in which both rigor and caring are demonstrated by and experienced as the awareness-based presence of all toward all. The central values of empathy, compassion, willingness to work with others to solve problems, and desire for mutual well-being arise out of those practices and lead to the transformation not only of the legal education process but of law students themselves.

The contemplative approaches brought to bear on the study of race and law in my classes appear to assist my students in examining legal cases in their embedded contexts, examining their own and their families' historical experiences at the intersection of race and law, and communicating deeply with one another about its effects. These alternative approaches to teaching the materials make a difference in terms of students' capacities to understand the real-world implications of the law, enhance their sense of well-being and connection to one another, and make commitments to work for change.

Another approach is the infusion of these practices into substantive core or traditional courses. For example, when teaching about racial profiling—the practice by law enforcement officials of targeting people for suspicion based on race, ethnicity, or national origin—we discuss such matters as criminal profiling generally and its disparate impact on Black and Latino men. We look at cases such as *Whren v. United States* (1996), in which the U.S. Supreme Court insulated police from Constitutional criticism over racial profiling by holding that any traffic offense committed by a driver was sufficient probable cause for a search. In addition to parsing the case for the legal rule and discussing the court's reasoning as we would in a typical law school class, we look at an analysis of its impact by Professor Kevin Johnson, a Latino critical race scholar (who happens also to be a law school dean). We look at data from studies such as one by Yale law professor Ian Ayres which showed not only that Black and Brown men are disproportionately stopped in the city of Los Angeles, but that these racial disparities are by no means justified by legitimate policing practices—such as deciding to police more aggressively in high-crime neighborhoods. In fact, the study showed that Blacks and Latinos tended to be less likely than whites who were stopped and searched in Los Angeles to be carrying weapons or drugs. The data show that Black and Brown men continue to be "over-stopped, over-frisked, over-searched and over-arrested" (Ayres, 2008).

I then incorporate self-reflection and reflection on their own experience of this system. I ask students to reflect on their own experiences with the police. How many have been pulled over for a traffic violation? How many, as a result of that, have been subjected to a full car search, including the trunk? At this

point, often the only hands left in the air are those of the African American and Latino students.

There is one other hand in the air. Mine. Their Black female professor. I had the experience of being pulled over for going literally three miles over the speed limit on a California highway and having the officer ask, for no other apparent reason than, well, my race, to search my car, including the trunk.

I continue our reflection with another prompt: How many have been pulled out of their cars and have had a gun put to their head? By the end, only Black and Brown men's hands remain held above their heads. All of my students are given a chance to reflect on what all of this means to them—as individuals, as members of communities, as thinkers and lawyers in training, as citizens. How do these patterns help us understand the persistence of "race," anti-Black and anti-Brown ideology, racial hierarchy, and the role of the law in all of this, in 2016?

These discussions, then, provide rich opportunities for reflections by each student and by the group as a whole at a variety of levels—personal, interpersonal, and intersystemic. They invite consideration of the justice system, and perhaps even of unconscious or semiconscious aspects of racial reactivity (stereotyping and the like) that will require more than individual work to undo.

This type of teaching is not for everyone. But I know that many of my students wish that more of their professors were more comfortable supporting deeper exploration of issues like this as they relate to the range of subjects across the curriculum. With the support of contemplative inquiry methods, they become more capable of sitting with hard questions like: how do we promote equal dignity, concern and deeper understanding about topics like this, and increase both substantive and holistic-spiritual knowledge on the part of all, without suggesting that everyone's point of view is equally constitutive, helpful, or harmful; or, that everyone's or every group's experience is factually or morally equivalent? We work through such hard questions with the goal not of answering them once and for all but of living our way through to the best answers we can find, together—provisionally, paradoxically, and as profoundly as we are able given our limitations and our resource constraints. Through all of this work, we all heal a bit more, individually and together. We co-construct a vision of healthy, diverse, reconstructed communities in which everyone matters. We begin to reimagine the world. From this set of insights and experiences, students are able to envision new, principled ways of bringing the law to bear on issues dealing with race. We begin to imagine ways of dealing with these realities of our lives that make real the promise of equality under law and at the same time manifest the kind of contextualized validity and resonance in lived experience that feels like justice.

Reimagining Law: Contemplative Changes to the Law We Make

Among the most challenging questions that my students seek to address is this: how might we support engagement with these questions through law, in ways that go to the roots of the problems that the law seeks to address? For example, in my own experience, and in the experience of not a few of my students, contemplative inquiry into racism, race, and law necessarily invites a look at what race itself actually means when it arises as a barrier to inclusion and leads to what the law calls discrimination. It invites inquiry into the persistence of notions of biologically-essential racial difference, rooted in the pernicious thinking made politically and legally critical in public life in the 17th and 18th centuries, and its particular and stunningly effective racial domination and conquest agendas. Students begin to wonder: how may we simultaneously support the deconstruction, where appropriate, of scientifically questionable notions of biologically-essential differences among human beings, rather than simply re-inscribe these ideas, from generation to generation, and uphold the human dignity interests at the heart of an Equal Protection clause, the interpretation of which has, for so long, that relied upon these racial ideas? When we look to recent research on the persistence of racially-polarized beliefs, we learn that questions like this are seen as especially important: recent research confirms (a) that the belief in biologically-essential racial difference persists, despite the lack of support for this idea among most scientists, and (b) that belief in such differences correlates with unwillingness to support policies that promote equality. We may not have the answers, but we know that through the process of inquiring together in these ways we are becoming stronger and more deeply intelligent as a community, more capable of working and thinking together, across categories of supposed difference, toward provisional answers that could result in a more just world.

Beyond Law: What Does This Suggest About Ways That Contemplative Inquiry and Pedagogical Commitments can Help All of Us Educate for Justice?

Many of us have learned from experience that these practices assist students in dealing with these issues, getting through the difficult experiences of reactivity, opening their hearts, and finding common ground. Research is beginning to bear this out, and experts in general education and curriculum development, as well as the specific study of positive intergroup relations, are all recommending mindfulness as one contemplative approach to assist us in creating more inclusive, identity-safe classrooms. Through these practices, we are able to know our subject matter in ways that benefit from the diversity in our midst, and increase the likelihood of developing knowledge and living our values in ways that support greater opportunity for success for all.

A Question of Justice, for Each of Us: What Are Some of the Ways That Contemplative Approaches to Our Classrooms can Assist Us in Creating More Inclusive Spaces for Learning and Growing Together?

As indicated above, research more and more reliably confirms the importance of inclusive, identity-safe communities for effective learning and teaching. So a meta-pedagogical question, regardless of our subjects, is this: how do our particular contemplative pedagogical methods actually assist us in creating more inclusive, effective, and just learning communities? Whatever our particular subject areas, I believe this big question should be a significant part of the focus of our mutual inquiry as we develop ways of incorporating contemplative practices into our courses. Not only will our efforts in this regard deepen all our students learning, but they will have the effect of creating a more just society.

How Might We Support One Another in Exploring That Question?

A growing network of contemplative teachers is committed to helping us think through this question together, as a far-flung but dedicated learning community. We are committed to doing what we can to support one another and our collective in this re-education and re-teaching project. This is a continuation of a long-standing strain in the work of leaders in the contemplative pedagogy movement, and one which we believe deserves ongoing attention and focus.

So my first hope is that this essay offers additional support for you as you reflect on this question. May you ponder and develop ways of reconceptualizing your courses from the standpoint of diversity, richly understood: the valuing of wholeness, equanimity, and inclusivity in our classrooms and the development of sophisticated processes to support it, creating identity-safe classrooms and the capacity to address and heal infractions when and where the need arises.

Taking a Good Thing Even Further: Contemplating Curricula, Pedagogy, and New Educational Structures for Changing the World

My wildest hopes extend even further. Given what we have now learned about the value of these practices in our lives and the lives of others, the time has come to expand our own vision of the potential scope and reach of what we in the contemplative pedagogy movement are really doing in education. I believe that we must expand that vision beyond our efforts in our individual classes, courses, and disciplines *to encompass the reenvisioning of education itself.*

The mounting evidence of the crises facing higher education, broadly, is known to all of us. Contemplative approaches to education provide sound means of responding to these crises, helping us not only to articulate the value of face-to-face, in-person engagement with students, but also to demonstrate the ways that these approaches assist us in the specific and profound challenges facing our world today. These include not only the challenges of working together in ever

more diverse groups and communities, but also, for example, how to make better decisions and collectively govern in effective ways; how to work more effectively with technology; how to help survivors of trauma and vicarious trauma, such as those that may come in greater numbers in the wake of war and global climate change; and so on—all of which have implications for contemplative law and are subjects of ongoing research and inquiry by others in the contemplative pedagogy community.

I see this rich array of contemplative offerings as providing support for these objectives: (a) helping us collaboratively discover how better to address issues of diversity and create identity-safe learning environments in law and across the academy, through contemplative approaches; and (b) helping us reenvision *all* of education for more effective teaching and learning, toward a more just, awe-recognizing world (Schneider, 2004).

Conclusion

In this essay, I've described some of the ways that contemplative approaches to legal education and law practice have begun the slow process of infusing the legal system with a new consciousness, one that may amount to a new birth of freedom by and through law—for lawyers, and for us all. These changes are only just beginning. Like every significant transformation in legal consciousness—from the true meaning of the Equal Protection Clause for Blacks, women, and the LBGQT community to the slow shift away from institutionalized policies of over-policing Brown and Black communities for the sake of "law and order," and more—they may well take many generations to achieve.

Despite the enormity of the challenge before us, we must do what we can to imagine and work toward the education system a thriving, interconnected human community truly needs. We devote ourselves to thinking about renewing our ways of teaching and working with our students out of a "profound faith that there is meaning to our lives" (Slattery, 2013) and that bringing a contemplative approach to our teaching can assist us in expressing that meaning. This essay and the contemplative pedagogy movement, in law and across the academy, are about "find[ing] ways to affirm that vision for ourselves, for *all* of our students, and for the planet" (Slattery, 2013). These ways may help us all live the sense of diverse oneness that is, for so many of us, the benefit of the contemplative practices that are the heart of our capacity to dwell together, and to feast at this rich and savory banquet we call life, all the while helping to provide true sustenance to others along the way.

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Practically Impractical: Contemplative Practices in Science

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Contemplation has been described as a "long, loving look at the real," a character-ization that could equally well apply to science. In this paper, I frame a contempla-tive approach to the teaching and practice of science which draws strongly on the Christian monastic traditions. Students, in particular, struggle with the ever increasing information density in their course work which can cloud their understanding of the relationship of their work to broader contexts. I suggest that the monastic counsels of intentional simplicity, deep listening and constancy can provide a foundation for the design of science courses which help students engage more deeply with their work in the midst of a deluge of information, particularly visual and graphical information. I present four different contemplative practices suited for use in the scientific classroom and research lab: a simple, discreet stilling exercise for focus and attention, a 'behold-ing' approach to exploring visual data and two writing exercises designed for laborato-ry researchers.

Contemplation and science are often placed at opposite poles, one affec-tive and passive, the other objective and active. We suppose scientists to deal in the objective, using methods that seek to subdue the personal and subjective. We have a strong image of scientists as balanced on the balls of their feet, wrestling with the materials of the universe; or, more distressingly, we see science as a place where "men backed nature into a corner and beat her secrets out of her" (Ehrenreich & English, 1978, p. 152). The pervasiveness of this image is well captured in the "draw a scientist" test, which asks respondents to sketch a picture of a scientist. The instrument elicits a remarkably uniform response. The vast majority of people of all ages draw figures in lab coats standing at a lab bench full of arcane equipment, juggling test tubes and flasks, with-out-of-control hair (Chambers, 1983).

In contrast, we imagine contemplatives taking up the transcendent and the im-manent, through methods that are intensely personal. Nature is left undisturbed, her secrets safe. An analogous "draw a contemplative" exercise might yield images similar to those uncovered by a search-engine image search for "contemplative": peaceful, composed figures sitting still on cushions or balanced on one foot, unen-cumbered by attachments—and bald.

Our present society struggles with this conflict between science and the transcendent, a tension between seeing the world as a collection of objects that can be bent to our purposes and beholding the world as infinite and unknowable. At its very heart, my field of quantum mechanics wrestles with this dichotomy. How is it that matter—the stuff that surrounds us and *is* us—behaves as both discrete particles and infinite wave forms? My work as a quantum mechanic requires at the very least an implicit recognition of our fundamental inability to know everything with certainty: an acknowledgement that we dwell in a cloud of unknowing, that we cannot be separated from our experiments.

I would like to begin by arguing that "contemplative scientist" is not an oxymoron, but that these two approaches to engaging the universe can, should, and do pull in tandem. Next I ask what value a contemplative stance might have to the teaching and daily practice of science, and, perhaps more radically, I ask to consider explicitly embedding contemplative practices in the science classroom and research laboratory. Which core contemplative principles might be fruitfully brought to bear on curricular design? What are the benefits of contemplative approaches for the practicing scientist? Finally, I include a sampling of practical exercises drawn from these apparently impractical contemplative underpinnings.

While I want to make a pragmatic case that contemplative practices are useful tools for scientists, like the instrumentations, models, fact bases, or epistemological frames we use, I hope, more critically, to broaden the set of tools that we provide for nascent scientists, offering them not only ways to work better but ways to reflect on their work in relationship to the larger world.

Contemplative and Scientist

While "contemplative scientist" might now seem to be a contradiction in terms, it surely was not for Gregor Mendel. The 19th-century Augustinian monastic and physicist, certainly supported by his own and his community's contemplative practices, carefully contemplated the ways in which flowers passed traits from generation to generation, and so built the foundations for modern genetics. Such figures are not unique to earlier times. The current abbot of the Benedictine abbey of Saint John's in Collegeville, Minnesota is John Klassen, O.S.B., a published organic chemist. Jesuit brother Guy Consolmagno, S.J., has written more than a half-dozen popular books, including *God's Mechanics* (2007), a study of the religious perspectives of scientists and engineers, and over 100 scientific papers on planetary science—and retreats for a week each year in contemplative silence. Elizabeth Lund, PhD, has a faculty position in chemistry in Canada, taken up after spending a decade as an ordained Buddhist nun in Thailand. I move from chanting Lauds with a group of Augustinian monks at 8:30 each morning to talking to students about quantum mechanics by 9:00.

Despite a rich set of examples of scientists who are inarguably contemplatives, I suspect we are most comfortable imagining that their work as scientists and their "work" (if we wish to call it that) as contemplatives are independent of each other. Yet my experience is that the mindset I have when I chant in chapel or sit in meditation at night is not fundamentally different than the stance I take in either the classroom or my research work. Science is way of looking deeply into the universe. It is not so much a collection of facts or techniques as it is a way of painstaking reflection.

The Impractical: Some Principles for Contemplative Teaching and Research

My own contemplative practice centers my work both in the classroom and in the research arena. It is grounded in sixteen centuries of Christian contemplation, beginning with the fourth-century desert solitaries who, about a hundred years before Zen Buddhism emerged in China, fled cities and towns along the Mediterranean to practice meditation and a stark simplicity of life in the Egyptian desert, breathing in the transcendent. I am trained in the 500-year-old Ignatian tradition, the core of which can be tidily encapsulated as "contemplation in action," and formed by longtime practice with a local Augustinian monastic community.

The Ignatian way fosters and values an awareness of the daily and the present moment, as well as the expectation that right action will emerge from such a practice. The Augustinian tradition, a monastic practice drawing from rules of life set out by St. Augustine in the fourth century and St. Benedict in the sixth century, sharpens the ability to listen to specific voices within a community as well as to the unified voice of a community. Both traditions are formulated within the so-called evangelical counsels, which privilege the virtues of poverty, obedience, and chastity.

How do the principles that undergird my personal practice play out in the context of my teaching? While the taking of vows of poverty, chastity, and obedience sounds a faintly intimidating medieval tone, I would argue that these stances can be fruitfully reframed, at least for this 21st-century professor.

Poverty as Intentional Simplicity

How does my teaching change by conceiving of poverty not as having less than what I need but as a deliberate simplicity with regard not just to material things but even to the construction of a course of study? The 16th-century Basque contemplative Ignatius López de Loyola, who founded the Jesuits, a Christian order of religious men known for their educational mission and erudition, prefaces his *Spiritual Exercises* with the caution, "For it is not much knowledge that fills and satisfies the soul, but the intimate understanding and relish of the truth" (Puhl, 1951,

p. 2). There is, I believe, a value in intentionally restricting the amount of material I place in the classroom, even as the information available to us in these times is a torrent compared to that accessible to Ignatius.

As our fields grow, we are tempted to cram more information into our core courses. My own discipline of physical chemistry is no exception. The text my mother used in 1954 is half the length of the text I use today, but the number of semester hours devoted to the area is the same, and I suspect the capacity of our students to integrate complex mathematical material has not increased either. Yet we often subscribe to a vaccination model of curricular development. We include additional topics so "they will have seen it." Does a vaccination model work in science? Do students who have "seen" a topic recall substantive details about it? Do they remember seeing it at all?

In 1984 Hendrickson and Herbert reported the results of an experiment exploring the relationship between information density—how much was covered in a single course—and comprehension. Students were placed in one of two sections of a biochemistry course in a medical school. One section had the standard course, which covered a large body of material. The second section covered less material, but the syllabus was crafted to cover only the core principles. Both sections took the same final examination. Students in the informationally impoverished course scored significantly higher on the final exam. The other section may have "seen" more, but they did not retain more by this measure.

While there are other examples of the same phenomenon to be found in the literature, this is the one that speaks most powerfully to me, as medical students excel at mastering large bodies of information quickly. Poverty in the classroom might look like this: teach less, and they can learn more.

A stance of simplicity also supports a patience with silence in the classroom. Every second need not be filled with either me or my students speaking. Finally, it argues for assigning a reasonable amount of reading, particularly for technical material. Fifty pages of novel, highly technical reading takes roughly four hours to read once. I am careful to point to areas of the text where I expect close reading and other areas where skimming is acceptable, and to be attentive to the total time students will have to devote to the readings.

Lowering the information density in the classroom in any (or all) of these ways offers an opportunity for increased reflection: say less, and they can think more.

Obedience as a Deep Listening

The Latin roots of the work *obedience* are *ob* and *audire*: to listen deeply. An obvious facet of this virtue in the classroom is a willingness to listen to my students, not just to their superficial desires (fewer problems that require application of the product rule for differentiation) but to their deeper needs: to consider, for

example, why they are taking this class, beyond the fact that it is required for the major. Less evident might be the ways in which I listen to the world outside my classroom. My commitment to teaching from a contemplative stance unfolds into teaching a context-rich curriculum, one which directly addresses the connections—the lines of communication—between chemistry and the everyday, as well as between chemistry and cognate fields.

For example, the decomposition of dinitrogen pentoxide is featured in most physical chemistry texts of the last century as an iconic example of the reactions that follow first order kinetics. The reaction is otherwise of little interest to chemists. It was originally done because the researchers wanted to put a new instrument through its paces and gaseous dinitrogen pentoxide was readily available in their laboratory (Daniels & Johnston, 1921). Could I teach the same fundamental concepts but simultaneously place them in a richer context?

Consider that the racemization of amino acids, in which nature's preferred left-handed form converts to the right-handed structure, is a slow process that also exhibits first order kinetics. Archaeologists use the process as a clock in the same way that carbon-14 is used, to find the age of materials that contain proteins. It's a long clock, enabling archeologists to probe time frames that carbon-14 dating cannot (Brooks et al., 1990). Conservation biologists have used the reaction to establish the ages of individuals within a population, discovering, for example, that bowhead whales have a lifespan of at least 150 years: important information for those managing resources (George, Bada, Zeh, Scott, & Brown, 1999). Substituting the details of this reaction for the iconic nitrous oxide work allows students to enter into a conversation with other fields and models for them the ways in which scientific work can extend beyond the walls of the laboratory.

Chastity as a Virtue of Trust and Constancy

The practice of chastity often evokes images of restriction and isolation, but when well-lived it provides a solid foundation for relationships. In my classroom practice, this presents as a clarity of expectations in both directions. Students can expect from me clear guidelines on the work and how I will assess it, and regular access to me for feedback between assessments. I expect students to come prepared, to engage substantively in the classroom, and to respect my time for other work. They can expect of me a constancy: I will not upend due dates or assignments without true need. I expect them to help each other and to help me.

One might argue that my way of being in the classroom, a way that is contemplative and intentional, is simply good pedagogy. I would not be inclined to disagree. But even the best classrooms are cloistered spaces, with a curricular plan and fixed beginnings and endings. Scientific research, on the other hand, seems to proceed at a rapid, dizzying pace down an infinite and winding road. Scientists

have wild hair not in conscious imitation of Einstein but because they can't take the time to comb it. Surely to be contemplative in this milieu is to be left behind, perhaps far behind.

Yet I would suggest that there are practical benefits to being a contemplative scientist; that despite our image of the monk on a cushion, *contemplative* is not a synonym for *slow*. I believe that a contemplative approach to scientific research can (a) offer an antidote to the utilitarianism and reductionism that can restrict our vision; (b) counteract stress and encourage the sense of spaciousness that often accompanies ground-breaking discoveries; (c) develop a nonjudgmental eye; and (d) cultivate an ability to work with a wide variety of data, particularly the visual.

An Antidote to Utilitarianism and Reductionism

Some, though by no means all, philosophers of science hold that science encompasses more than what can be approached using the scientific method, more than we can capture by an enumeration of measurements and observations. Michael Polyani (1967), a twentieth-century philosopher and scientist, called this *tacit knowledge*: "We know more than we can tell." Chemists, in fact, often speak of bringing their "chemical intuition" to bear on a problem: their tacit knowledge, not necessarily captured in any set of chemical rules, of how molecules behave in particular circumstances.

Barbara McClintock, who won the Nobel Prize in Physiology or Medicine in 1983, would agree with Polyani and the chemists that "[t]hings are more marvelous than the scientific method would allow us to perceive" (Fox-Keller, 1983, 203). Her sense that something more than meets the usual scientific gaze was at work led her to the discovery of mobile genetic elements (genes that could change positions on the chromosome) and led the Swedish Academy to call her work as groundbreaking as Mendel's.

Science advances not only through its ability to reduce systems to their falsifiable essentials and test their validity, but by giving a voice to tacit ways of knowing. I am reminded of Rene Magritte's self-portrait *Clairvoyance*. The artist is gazing at an egg on the table next to him, while on the easel is emerging a bird in mature plumage. Contemplative practices can tune a scientist's ear to sources of information they can't yet fully recognize, pushing research in new directions.

A Sense of Spaciousness

Our classroom practices often favor the fast and furious over the attentive and reflective, and this agitation frequently carries over to the research lab. Can we make this grant deadline? How many hours did you put in this week in the lab? Will we be scooped by someone who worked faster?

But are fast-paced, high-pressure environments necessary for scientific progress? In a case study of the discovery of high-temperature superconductors, physicist and historian of science Gerald Holton (1996, 364) suggests the opposite: "Scientific change depends on an unforced pace of work." Seen from this perspective, science is a contemplative practice. There is no technique that guarantees enlightenment, only structures that increase the probability of discovery. Contemplative practices foster a particular patience with the world, encouraging a deliberate, unforced (though not necessarily slow) pace; imagine the swift ripple of the melismata in a chant. Spaciousness, internal and external, has value to the contemplative, as does thoughtfulness about what the work is and how it will proceed.

Contemplative traditions have something more to offer to scientists than a pacing of research work, particularly in the ways in which they create boundaries and foster a realistic balance between work and leisure. In this measured century, we can show that there is a nonlinear return on work hours. You don't get twice as much done if you work a 16-hour day as opposed to an 8-hour day, or even 50% more done in a 12-hour day (Robinson, 2012). Most monastic rules insist on daily and weekly times of recreation. Benedictine communities set aside time near the end of the day for activities that rest the mind. The cloistered Carthusian monks take a weekly long walk through the local mountains. Trappists build their monasteries on the plains, to emphasize the spaciousness of their life.

Developing a Nonjudgmental Stance

On one level, it is obvious that scientists need to be able to reserve judgment, to hold an open mind: an ability to see what is real, not what they hope is real, with respect to results and conclusions. The day-to-day doing of science also requires a decided clearness of mind and focus. Of course, many of us, from our own experience of practice in and out of the laboratory, know that we cannot achieve this; instead, there is an internal and external racket that distracts us from seeing what is there: "Is this significant? Will this be fundable? Is this publishable? Can I confirm this result before dinner? What is for dinner?" Robert Alter's (2007) beautifully raw and poetic translation from the Hebrew renders the famous "be still" of the 46th Psalm as "let go your grasp." Contemplative approaches offer ways for scientists to be able to clearly recognize and then let go their grasp on the distractions.

Awareness of Multiple Dimensions

In its 2012 report *Discipline-Based Education Research*, the National Research Council raises concerns about science students' ability to grapple with visual and graphical data (Singer, 2012). The advent of readily available computing and high-resolution graphic devices has increased the complexity and sophistication with which

scientists display information. Color and depth add additional layers to lines and surfaces. Three-dimensional printing is poised to further increase the richness of information displays, enabling the encoding of data onto surfaces as textures, making it possible to render six-dimensional information in a single object.

Contemplative approaches can help students and researchers to not only cultivate an awareness of the multiple dimensions in which we engage the physical world, but also develop a facility with the audible, visual, and tactile representations of data we create.

The Practical

> Experiment escorts us last—
> His pungent company
> Will not allow an Axiom
> An Opportunity.
>
> —Emily Dickinson

How do these principles play out in practice, in my classroom and in my research laboratory? I limn below four different practices that I use when teaching writing, physical chemistry, and general chemistry (including the pre-med section), and with my graduate and undergraduate research students.

Focused Attention

The purpose of this practice of "listening outward" is to still the mind, diminish distractions, and bring focus to the work that follows. It fosters a sense of spaciousness and can be done quickly in an inconspicuous manner even in a crowded space. I teach it to students to use before they begin an exam in a crowded space, as well as to students who are trying to focus on a difficult task in a noisy laboratory.

Time: 30 seconds to 2 minutes

Sample instructions: If you wish, close your eyes. Begin to listen to the sounds nearest you - the student at the next desk rustling papers, the pumps chugging at the lab bench, the roar of the fume hoods. Acknowledge what you hear. Slowly extend your awareness outward, leaving behind as you do your consciousness of the nearby sounds. What do you hear just outside the room? In the hallway? Outside the building? Let your awareness of the sounds move outward from where you are, until it reaches the very edges of what you can hear (the nearby major street or highway?) and just beyond. Set aside each ring of sound and movement as you do so.

One image that people find useful is to think of all the noise and chaos in your mind and around it slowly flattening out as ripples do when they spread in a large pond. As the ripples move outward, the center stills.

When you have stretched your senses to the limit, hold your attention there for a moment, then take a breath and turn your attention to the task at hand.

Beholding Graphical Data

Nothing is worth noting that is not seen with fresh eyes.

—Matsuo Bashô

So much of science is visual, but despite the ability to produce and call up sophisticated visual information it can be difficult to see something you are not expecting or to try to guess what the instructor or author wants you to see in a given illustration. I use this exercise to frame a two-week section on the harmonic oscillator and vibrational spectroscopy in the physical chemistry course which is required for the major and typically taken in the junior year. Many of these students are beginning their research work, engaging for the first time with the breadth of the scholarly literature in chemistry, and they are often taking biochemistry simultaneously and struggling with 3-D images of proteins and graphs of complex kinetic data.

This exercise had its genesis in a series of conversations with the late Jodi Ziegler on her work with the beholding of art, particularly her class at Holy Cross in which students sit with and confront the same piece of art repeatedly over the semester (Dustin & Ziegler, 2005). It also draws on the Christian tradition of *lectio divina*, a practice of closely and meditatively reading short pericopes from sacred sources.

Time: Approximately 10 to 15 minutes.

Sample Instructions: I project on the screen a graph of the harmonic oscillator potential for a diatomic molecule for hydrogen bromide, HBr). The graph shows the quantum mechanical energy levels and the corresponding probability distributions for the first four states of the harmonic oscillator solutions. The probability distributions are scaled to that of the lowest energy state. The horizontal axis represents the displacement of the molecule from its equilibrium length in meters (molecules are small; the length of an HBr molecule is on the order of billionths of a centimeter).

I ask students to quietly spend 3 to 5 minutes looking at the image. I turn off the image, then ask them to take 1-2 minutes to sketch what they saw in their notes. I turn the image back on, then ask students to tell me what they notice about the graph. Various suggestions arise; I note them, without comment, on the board. I select one from the list, the one that has been mentioned most frequently, and proceed to develop the day's lecture from that point. Once we understand this point, I proceed to the next most commonly noticed point.

I repeat the beholding exercise at the start of each of the two 90-minute classes I will devote to this. At the end, if there are points that are critical that students have not brought to the surface, I am prepared to tell them what I see, but in general students at this level will, given time, notice everything I think they should about this graph. Note that you have to be prepared to lecture on what the students notice, not in the order you prefer!

I use several of these exercises during the semester, and students report on the end-of-term evaluations that these are among the most helpful thing I do, as helpful to them as the ability to write solid computer code (another prosaic skill this course teaches).

Lab Reflections

I ask research students to spend the last few minutes of their research time each day reflecting on the work just completed, going beyond the customary practice of detailing experiments and observations, planning where they will go next. This practice is well-grounded in many contemplative traditions, such as Ignatius of Loyola's Examen (Manney, 2011). On a pragmatic level, in my experience it measurably increases research productivity, as students can begin work quickly the next time they are in the lab. It also deepens their familiarity with their work: Polyani's (1967) "tacit knowledge."

Time: 5 to 10 minutes

Sample Instructions: Plan to stop your research work 5 to 10 minutes before you have to leave. If possible, sit at a desk away from the lab bench. Look over your notes from this period in lab, and flesh out any details you might have given short shrift to as you worked. Restate one or two things you observed or learned today. Write down what you will do the next time you walk into lab. Be specific: not "start a reaction" but "set up the Grignard addition for compound C, R=methyl, in the current series."

When I spoke about this in a workshop on writing for science students, a faculty member told me he couldn't imagine recommending such an approach; his immediate thought was that if he saw a student sitting at her desk writing he would tell her to get back to work. Upon reflection he wondered if that was not counterproductive. He reported to me some weeks later that this strategy of stealing time to contemplate their research had helped his students to be more efficient in the lab in the long run.

Periphrasticity

The truth is concrete (or particular).

—Karl Rahner, S.J.

Robert Boyle (1772), one of the first modern chemists, was a vocal champion of doing research in "the presence of an illustrious assembly," and the standard procedure for experiments conducted at the newly founded Royal Society required the signatures of the witnesses to be recorded. Bowing to the impracticality, even in the 17th century, of gathering a scientific cohort for each experiment, Boyle advocated for vivid descriptions and elaborate woodcuts, rich with circumstantial details that served to create the illusion that the reader was present in the laboratory.

Scientists today often take a periphrastic approach to the creation of new vocabulary. The term *laser* arises from the acronym *light amplification by stimulated emission of radiation*. This description contains enough clues for an experienced quantum physicist to recreate the underlying equations that prompted the design of the laser. The particularity and richness of description are an aid to awareness—to see and appreciate in all its particularity "what is"—as well as providing some counterbalance to reductionism. Molecules are more than their molecular structure (Francl, 2012).

This exercise is based on a writing prompt from Natalie Goldberg's (2005) helpful book *Writing Down the Bones*. I have used it when teaching a research methods course which included substantial laboratory time as well as the writing of several long research reports; when teaching science writing; and in workshops for students and practicing scientists. The subject can be varied to suit audience and circumstances, though I have a personal preference for the whimsical. I have used durian in a workshop for students in Singapore, where the unusually scented fruit is a delicacy to some (and a smelly nuisance to others), or an extremely familiar (to chemists) molecule such as benzene.

Time: variable, typically from 5 minutes to 15 minutes

Sample Instructions: Tell me everything you know about Jell-O. Be rich, even over-the-top, in your description. Write freely, to be read only by yourself. Use adjectives with abandon; modify metaphors as needed.

In addition to expanding their awareness of their work, giving scientists permission to be poetic and lively in their descriptions of their work eventually enlivens their formal writing. I often close this exercise by sharing newspaper editor William Allen White's advice (often attributed to Mark Twain) that if you write "damn" everywhere you want to use "very," your editor will take out all the "damn"s and your prose will be perfect. Vibrant prose that has been dialed back in a formal work is more likely to retain a touch of that vividness in its final form than stiff writing that one tries to liven up after the fact.

Conclusion

Marcel Proust (2006) noted in *Remembrance of Things Past* that the real voyage of discovery consists not in seeking new landscapes but in having new eyes. My hope here is to show that a contemplative stance in the classroom and in the laboratory is not at odds with a scientific one, when seen with different eyes. The late Jesuit theologian and writer Walter Burghardt (2008) called meditation "a long, loving look at the real" and I suspect many scientists would not argue with that as a description of what they do. Nor, I imagine, would many poets. On one level I see contemplative approaches in science to be a link to humanistic methods of inquiry, an overlooked bridge between C.P. Snow's (2012) "two cultures."

Felix Bloch and Edward Purcell won the Nobel Prize in 1952 for their pioneering work on nuclear magnetic resonance (NMR), the fundamental physics behind magnetic resonance imaging (MRI). The opening to Purcell's Nobel lecture is almost poetic in its intensity and describes a loving look at his very real science:

> Professor Bloch has told you how one can detect the precession of the magnetic nuclei in a drop of water. Commonplace as such experiments have become in our laboratories, I have not yet lost a feeling of wonder, and of delight, that this delicate motion should reside in all the ordinary things around us, revealing itself only to him who looks for it. I remember, in the winter of our first experiments, just seven years ago, looking on snow with new eyes. There the snow lay around my doorstep—great heaps of protons quietly precessing in the earth's magnetic field. To see the world for a moment as something rich and strange is the private reward of many a discovery.

In her book *The Cloister Walk*, Kathleen Norris (1997) wonders how to "keep as much of the monastery in [her] as possible" as she and her husband return to their daily routine, and how she can draw on the wisdom of the Benedictine scaffold for a monastic life in her day-to-day life outside the walls. I hope that I have shown that there is practical knowledge to be gleaned from what seem like such impractical lives, and that, regardless of how one frames or defends them, such ways of being have a place in the scientific landscape.

Above all I hope that, however we approach teaching or research, we deliberately cultivate in ourselves and our students a sense of wonder, and even joy, in what we see, for most of us do science, not to dispassionately strip the universe of mystery, but for the delight of seeing the world, at least for a moment, as a rich and strange place.

> But out of such persistence arose turtles, rivers,
> mitochondria, figs—all this resinous, unretractable earth.
> —Jane Hirshfield, *Optimism*

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Mindful Tech: Developing a More Contemplative and Reflective Relationship With Our Digital Devices and Apps

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Today's digital technologies are both powerful and powerfully distracting. The challenge we face is to use them to their best advantage, and to ours. This article describes one method that may help us to face this challenge: bringing mindful attention to the ways we currently use our digital devices and apps, discovering in the process what is harmful, or at least disadvantageous, in our current digital habits, and through this process formulating more beneficial ways to work online. The bulk of this article reports on the mindfulness exercises developed for a course on Information and Contemplation that has been taught in the University of Washington's Information School since 2006 and that form the basis for a new book, "Mindful Tech: How to Bring Balance to Our Digital Lives" (Yale, 2016).

Today's digital technologies are both powerful and powerfully distracting. They are tools that direct our attention in useful ways: to browse and investigate vast troves of information, to communicate with one another, to amuse and entertain ourselves. But at the same time, the availability of so much information, along with the social pressure to stay connected and to respond rapidly, has contributed to a widespread sense of overload and distraction. Clearly, the challenge we face in the years and decades ahead is to figure out how to use these remarkable tools to their best advantage, and to ours.

For many years, as a professor at the University of Washington's Information School, and before that as a researcher at a well-known high-tech think tank, I have been exploring the power and perils associated with our newest information technologies, focusing in particular on the problems of information overload, acceleration, and the fragmentation of attention. My interest has been in bringing a contemplative perspective to bear on these problems, asking how disciplines that train the mind and body to be more attentive and flexible might help us to make better use of these technologies—to be more healthily and effectively engaged with and through them, as well as to decide when to abstain from using them.

Since 2006, I have been teaching a course called Information and Contemplation, in which I bring contemplative practices into the classroom as a means of helping students to investigate their own use of digital technologies, to identify positive and negative features of their use, and to develop guidelines for more effective future use. The central, and perhaps most original, feature of this course is the way it helps students to become more mindful of their relationship with the information technologies they use every day as, through a series of structured exercises, they bring attention to their moment-to-moment experience while they are online, in the process learning more about what is working well for them and what isn't.

In an earlier essay, I wrote about the first version of the course that was designed for delivery in 2006 (Levy, 2014). The course has evolved considerably in the intervening years, and I have completed a book, *Mindful Tech: How to Bring Balance to Our Digital Lives* (Levy, 2016), that is intended to offer the exercises to a broader audience. This paper describes the current version of the course, focusing on the development of a sequence of four exercises, and on my growing understanding of the philosophy of learning that is central to the delivery of the course.

Overview of the Course

In 2005, I was awarded an academic fellowship by the Center for Contemplative Mind in Society (www.contemplativemind.org) to create a course that explored how contemplative practices might illuminate the use of digital tools and technologies. The initial course, which was open to both undergraduates and graduate students, was taught in spring 2006. The following year, I twice offered the course to library staff, in a not-for-credit version. Since then, I have offered shorter workshops, presenting an abbreviated version of the approach at various universities, and I have experimented with an online version of the course, in addition to teaching the original, for-credit residential course.

The course, called Information and Contemplation, is taught in the Information School (iSchool) at the University of Washington, which is an outgrowth of the university's School of Library and Information Science.[1] The iSchool offers four degree programs: an undergraduate major in informatics, which combines training in computer and information science and the social sciences; a master's in library and information science (MLIS); a master's in information management (MSIM), which is more oriented toward business than the MLIS degree; and a PhD in information science. The course is open to students in all four iSchool programs, and, space permitting, UW students in other programs—at the undergraduate, master's, and PhD level—are also welcome.[2]

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1 For more about the Information School movement, see http://ischools.org/.

2 The course is offered as an elective, and because of its somewhat unusual nature—no other course at the iSchool explicitly incorporates contemplative practices—I interview prospective students face-to-face before granting them admission.

The course has three main pedagogical threads: first-person contemplative practices, seminar-style reading and discussion, and first-person student explorations of technology.

First-Person Contemplative Practices

The course brings contemplative practices into the classroom as an active object of investigation. During the first week, I introduce two simple practices, one a silent seated breathing practice (Mindful Breathing), the other a scan of body and mind (the Mindful Check-In). Over the course of the ten-week quarter, I introduce additional practices, including walking meditation, mindful reading and writing, and a dialogic speaking/listening practice. Most classes begin with fifteen minutes of contemplative practice. In the last few years, I have brought a skilled bodyworker to class to talk about sitting, standing, and walking from a physiological perspective. She explains to students how alignment and relaxation play a central role in these basic activities, and she helps them experience how posture and alignment affect breathing and emotional response. I encourage students to notice which of the different practices they are most drawn to, and to focus on those forms that work best for them (some students prefer a seated or standing practice without movement, while others are drawn to movement-based practices).

Seminar-Style Reading and Discussion

Formally, the course is organized as a reading and discussion seminar. I insist on teaching the course in a room whose chairs and tables are movable (not always easy in an institution where many classrooms consist of fixed tables arranged in stadium-like tiers), and I arrange the tables in a rectangle so we all face one another. I limit enrollment to twenty students in an attempt to create conditions conducive to active discussion. There are reading assignments for most class sessions, and a portion of most classes is devoted to active discussion of the readings. Some readings are concerned with contemplative practices, either from an experiential or from a more academic perspective. Others offer broad overviews, and sometimes critiques, of our information-intensive culture, addressing such issues as information overload, the acceleration of life, and distraction. We also read materials that discuss how contemplative practices and perspectives are being brought into contemporary culture.

First-Person Explorations of Technology Use

The third pedagogical thread gives students the opportunity to apply the contemplative practices and perspectives that we have been exploring to their relationships with their digital tools and applications. I take them through a series of exercises that ask them to investigate one or more information technologies or practices, to prepare a written reflection on what they have discovered that can

be shared with their fellow students and me, and to propose a set of personal guidelines that expresses their new understanding of how to operate online in healthier and more effective ways. In the first version of the course, there was only one such exercise (below called the Email Observation exercise), but feedback from students clearly indicated that they wanted more of them. Four of these will be discussed below.

Framing the Approach: A Contemplative Approach to IT

In the first two weeks of the course, I have two main pedagogical goals: to foreground and explore the relationship between attention and information technology and to introduce the core contemplative practices we will make use of.

Establishing a Connection Between Attention and Information Technology

We all realize at some level that attention plays a fundamental role in our use of our information technologies. As the Canadian psychologist Warren Thorngate (1988) says in an article we read in class, "Information is supposed to be that which informs, but nothing can inform without some attentional investment" (p. 248). In the first classes we identify three key modes or functions that this attentional investment may take—*focusing*, *noticing* or *monitoring*, and *choosing*—and we explore how these modes play a role in our online behavior (and, indeed, in everything we do throughout the day).

Focusing refers to our ability to sustain our attention on a chosen object. We do this when we open an email message, say, and read it through to completion. *Noticing* (or *monitoring*) refers to our ability to notice other, non-focal objects of attention, including the state of our mind and body—to maintain peripheral awareness while engaged in a task. We do this online when we hear our cell phone ring or hear the ding announcing the arrival of a new email message while we are on Facebook. Choosing is exercised when we become aware of more than one potential object of attention and decide which of them to focus on. Thus, if our cell phone rings while we're reading an email message, we need to decide whether to answer it or to continue reading the message.[3]

I explain that through first-person observation (observing ourselves) we will come to see more clearly when and how we currently exercise these three functions, as well as when these functions are deployed in healthy and effective ways and when they are not. It will be up to each student to observe him- or herself, to evaluate his or her behavior, and to decide what changes to make, if any.

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3   In the neuroscience literature on attention, these three functions roughly correspond to brain subsystems concerned with orienting, alerting, and conflict monitoring. "[A]lerting consists of achieving and sustaining a vigilant or alert state of preparedness, while orienting restricts processing to the subset of inputs relevant to current task goals, and conflict monitoring prioritizes among competing tasks and resolves conflict between goals and performance" (Jha, Stanley, & Baime, 2010, p. 213).

Core Contemplative Practices

In the first week, I introduce the two main mindfulness practices that will play a central role in the exercises: the Mindful Check-In and the Mindful Breathing practice. In the Mindful Check-In, I ask students to become aware of the current state of their mind and body—what they are experiencing in the moment—by guiding them to notice the quality of their breathing (is it fast or slow, shallow or deep?); the state of their body (what sensations do they notice? what is their current posture?); their current emotional state, however they would characterize it; and the quality of their attention (focused, distracted, or somewhere in between). I explain that a great deal of the learning they will be doing in the weeks ahead will emerge from paying attention to their present experience *while they're online*. The Mindful Check-In will give them a basis for answering questions such as "What am I experiencing when I set eyes upon my inbox?" or "What was I feeling when I decided to switch from email to Facebook?"

In the Mindful Breathing practice, I offer students a version of the most basic of mindfulness practices: paying attention to the sensation of one's breathing and bringing one's attention back to the breath whenever it wanders. I explain that this is an attention-training exercise. Bringing the attention back again and again can be likened to doing reps in the gym as a means of strengthening our attention muscle.

Both of these practices require the student to deploy all three attentional modes—focusing, noticing or monitoring, and choosing—but the emphasis (and the intended learning) is different in each of them. In the Mindful Check-In, students are monitoring their current state of mind and body, as well as the relationship between this current state and what they are currently doing online. In the Mindful Breathing practice, by contrast, the emphasis is on focusing—on repeatedly bringing the attention back to a single object of focus.

Exploring Monotasking and Multitasking: Four Exercises

I turn now to discuss four of the five exercises I currently assign in class.[4] The first two of these give students the opportunity to explore a single information practice, to monotask, using email. While another application could be chosen, such as texting or the use of Facebook, I've discovered that email is one of the few that all students are guaranteed to use—not everyone uses Facebook or has a cell phone—and it is crucial to the group reflection and discussion that everyone study and report back on the same application. The first exercise asks students just to observe their current use of email, while the second asks them to adopt a specific, focused approach. The second set of exercises asks students to investigate how they multitask: the way they shift focus among multiple tasks. Thus these latter two exercises parallel the monotasking exercises: the first asks students just

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4   The fifth is an unplugging exercise, in which students are asked to abstain from one or more devices or apps for a period of their choosing, typically 24 hours to one week.

to observe their current multitasking practice, while the second engages them in a more focused method.

The terms "monotasking" and "multitasking" merit some further discussion, because there is no single agreed-upon definition of these practices.[5] What's more, whether one is monotasking or multitasking will depend upon how one draws the lines between tasks. For the purposes of these exercises, *monotasking* means staying focused on a single application, such as email, while *multitasking* means switching between different applications, such as email and Facebook.

What follows is a brief description of each of the four exercises. (Readers interested in greater detail will find it in *Mindful Tech*.) Following the description of each exercise, I discuss the kinds of discoveries students make in performing it.

Exercise 1: Email Observation

This is the first exercise I developed for the course in 2006, and it remains the first exercise students undertake. It provides them with an opportunity to observe one of their technology practices close-up and see what can be learned by attending to their moment-to-moment experience of the practice.

The first step is to observe their email behavior for a week, for roughly a half-hour a day, using the Mindful Check-In to monitor their experience, and to keep a running log of their observations. At the end of the week, they prepare a written reflection on what they've learned, as well as a set of personal guidelines for future email use based upon what they've discovered. These are distributed to everyone in the class so they can be discussed in class.

What do students discover? It is common for them to express surprise at what they find out. My students are tech-savvy people pursuing information-related degrees, and they are surprised to discover how much they still don't know about their own experience, behavior, and practices. They are also often surprised to discover how much they can learn by observing the state of their minds and bodies while they're online. One of their most common discoveries is how emotional using email can be. As one student observed, "The most surprising thing for me throughout this process was the realization that I have a very negative relationship with email." Or as another commented, "I am surprised that as someone who embraces technology and an 'online life,' I hold such resentment and hatred towards one of my email accounts."[6]

Students also regularly notice and comment upon what triggers their desire

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5   Within the multitasking literature there is no single agreed-upon definition. A 2009 Stanford workshop on "The Impacts of Media Multitasking on Children's Learning and Development," for example, proposes several different kinds of multitasking, including macro-multitasking, micro-multitasking, and three different kinds of media multitasking (Wallis, 2010, p. 8).

6   I have chosen these and subsequent quotations from the student reflections that were written during the last three years of the course. Prior to that, I hadn't thought to get written permission from students to reproduce what they'd written. I have not attempted a formal analysis of these reflections, and I offer the quotations to give the reader a sense of the range of discoveries people make and the way they articulate them. Most important, for my pedagogical purposes, is that people are free, indeed encouraged, to make their unique discoveries.

to check email, and to check it frequently. Sometimes it's the hope that they will find something special waiting for them, a hope that is rarely fulfilled. As one student wrote, "The reason I feel the need to check my email all the time on my phone is the hope that I will have a new message from one or two people that I would love to hear from. But the fact is that 90+ percent of the time my emails are not of that personal nature. . . I am always hoping it will be the email I have been waiting for." Others notice that email is a way to get away from unpleasant feelings: "I most often feel the urge [to check email] when I would rather be doing something else. The most common time is during work. I use email checking as an excuse to defer the unpleasant and unstimulating task of doing my job."

Students also learn more about the quality of the attention they bring to email. Some notice that they are often distracted. "When checking email," one student observed, "I notice many voices and images in my head. I think about assignments due, meals I need to cook, people I need to call and meet up with, bills I need to pay, and the pain of my recent break-up." Others, however, are surprised by how attentive they are: "The quality of my attention to my email is very high—when I am actively reading or responding to messages, I am perhaps the most intensely focused of any activity throughout my whole day. I am more able to shut out distractions while doing email than while reading or engaged in conversation."

Once students have made these observations and reflected upon them, it is fairly straightforward for them to formulate personally meaningful guidelines. The person who realizes that she's checking email somewhat obsessively in the hope of finding the kind of message that rarely arrives might decide to notice the impulse to check email arising but not act upon it, at least some of the time. The person who realizes that her attention is especially deep might want to spend more time on email, or she might ask how she can carry this quality of attention into other activities as well.

Exercise 2: Focused Email

One of my students, as just noted, discovered that while using email she was often distracted by "many voices and images in [her] head." "This email exercise," she explained, "has taught me how cluttered my mind is and how it really disables me from truly being present with the task at hand." She then took this observation a step further, realizing that she might be able to counteract this tendency toward distraction by "remain[ing] conscious of my breathing and . . . focus[ing] my eyes and mind on the task at hand." This led her to conclude that "the act of email checking can be like meditation," and she wrote a guideline that reads, "Use email as a method of meditation and concentration."

The second exercise, on focused email, is meant to help students explore this possibility. In explaining this exercise, I draw a parallel with the Mindful Breathing practice, which asks students to repeatedly bring their attention back to the

breath when their minds have wandered. Here, in this second exercise, their task is to keep their focus on email (for example, reading an email message all the way through to completion), to notice distractions that pull them away from this focus, and then to bring their attention back to their email. As in the Email Observation exercise, they are to keep a log of their experience and to prepare a written reflection and a set of personal guidelines that can be shared with their fellow students.

What do they learn from this? One student summed up her experience by saying: "Overall, I felt that the exercise was very hard at the beginning, as I wasn't used to keeping my attention focused on one single task. I felt I started becoming more focused in my third and fourth attempt…[W]hen I became more focused and in my zone the quality of my emails improved…In general, I felt that this is a wonderful practice, as it helped me with not forgetting to reply to emails, as in my regular email activity I would check emails as soon as I received them and tell myself I would respond to the email but then I forget."

Another student discovered that in order to use email more mindfully he needed to slow down. "To keep my focus on the email I needed to slow down and really read the contents. In other words, I committed to investing real time to do email. Usually I rush through the email's contents, just scanning through the words as fast as I can, making quick judgments about its value and whether I should invest time into it. When I committed to actually reading each email slowly, I found my experience to be a much calmer one than usual. Strangely enough, emails that I regularly would delete or find irritation with suddenly seemed kind of interesting. They seemed to have value."

He also found that attending to his breath helped him to stay focused, especially when faced with stressful email messages, and this led him to a further insight that the stress of email was partly associated with the way it oriented him to the future and to tasks not yet done: "These exercises have shown me that email has been one of the triggers that would set me off worrying about the future. It makes sense that I tried to get through [the messages] as fast as I could. I was trying to avoid letting my mind get a chance to worry about the future; better to move on to the next one quick!" He concluded, "Email can be valuable and appreciated when managed in a slow and mindful way. I can't believe I just said email can be valuable and appreciated."

Yet another student was able to see value not only in using email more mindfully but in generalizing to other practices in her life: "I will certainly continue to explore methods of focus like this. My favorite part is the scalability: any task can be approached with the same careful attention. It may be a useful way to get a better gauge on what I really want to do, what actually deserves my careful attention."

It should be noted, however, that not all students found the exercise valuable to this extent. Some students, for example, realized that prior to the course they were *already* fairly focused in their email practices: "This assignment wasn't hard for me. I'm not really a multitasker when it comes to email." Others had discovered enough in the first exercise that they had already begun to change their email practice before approaching the Focused Email exercise: "Since [the first exercise], my interactions with email have changed dramatically." Still others found the exercise challenging, and at times resisted doing it: "That is an artificial exercise. I could also barely stand the thought of not going from email to calendar to email. The feelings of restriction were intensified by the fact that I made my email browser full-screen." Yet their reflections make clear that most students find value in it, gaining further insight into their use of email whether or not they ever intend to fully adopt this mode of focused engagement.

As in the previous exercise, the observations students make suggest changes to be adopted: to check email more slowly, to use awareness of breath as a way of staying focused, and so on. These are personal responses to personally-identified problems or limitations, not universal guidelines.

Exercise 3: Multitasking Observation

Today there is much concern about when and whether multitasking is healthy and effective (Wallis, 2010). Yet, while some believe it is a problem, others have concluded that it is a 21st-century literacy skill (Jenkins, 2009). The next two exercises steer clear of these broad pronouncements, instead asking students to investigate their own multitasking practice: to discover for themselves when it is useful to multitask and when it isn't, and how to multitask more effectively when it is useful or necessary.

The focus in the third exercise is on observing their current multitasking practice. But this exercise differs from the first (the prior observation exercise) in two important respects. First, I give students detailed directions about what to pay attention to. In multitasking, I explain, one of the central questions concerns when to stay focused on one's current task and when to switch to a different one; thus the attentional mode I have called *choosing* comes centrally into play. So it will be useful for them to notice when a new task has announced itself (e.g., because their phone has started ringing or a new email message has just appeared on the screen) and whether or not they have decided to switch to that new task or to stay put. Similarly, it will be useful to notice those points where they *did* switch to a new task and to investigate why they did so. This is a huge amount to try to observe, all the more so while one is engaged in densely textured, fast-paced activity, and so the second departure from the Email Observation exercise asks

students to *record* their multitasking sessions and replay them as a means of closely observing their behavior.[7]

I ask students to conduct several multitasking sessions, to record and observe them, to keep a log of their observations, and to prepare a written reflection and a set of personal guidelines that they can share with others. They are free to decide how many activities they will interleave; it isn't uncommon for students to bring email, texting, Facebook, Twitter, and other online practices into the mix. I also suggest that they consider varying the amount and degree of multitasking across the sessions (perhaps increasing or decreasing their load) or performing the sessions in different locations (at home versus in a coffeehouse).

What do students learn through this exercise? Some notice that their current multitasking practice works well for them: "Overall, I would characterize my multitasking strategy as one that seems balanced and I'm comfortable with." Others, however, are troubled by what they see: "My habits consist of a kind of scattered, hare-brained approach…I found my habits alarming. I really hope that part of my distractibility was due to trying to meet the requirements of the assignment, because otherwise I honestly don't know how I do anything effectively when the Internet is involved."

Between these two poles lie the majority of student responses, which indicate that they see aspects of their multitasking behavior that are working well and others that could use improvement. Some students observe their tendency to be easily distracted from their current task, and notice what triggers them: "Throughout the recording, I noticed that I kept on distracting myself many times. Especially when I was stuck with a problem or when I was not very interested in the task. It looked like I was bored and wanted to find something to entertain me."

Others notice a tendency to stay "stuck on the screen" in ways they find unhelpful and unproductive. One student coined the term "nullti-tasking" for this behavior: "I could call [this behavior] 'nullti-tasking,' where, once I've completed the full suite of Internet sites and email messages that I feel I need to get through, I'll sometimes pathologically refresh inboxes and watchlists, checking to see if anything new has come in over the past thirty seconds. This is really just an indication that I'm bored and haven't been confronted with anything new and demanding. It is time I could make much better use of by doing anything else in the world."

Once again, the guidelines that students compose are directly tied to their observations. If they've come to see a certain amount of their multitasking as a means of procrastinating or of avoiding certain emotions, they may propose

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7   There are a variety of commercial tools on the market that can be downloaded onto one's PC or Macintosh computer that will record everything happening on the screen, as well as computer-generated sounds (e.g., the ding of an email message arriving), ambient sounds (the sound of a phone ringing or a nearby face-to-face conversation), and the contents of the webcam (and thus the user's face while he/she is multitasking).

becoming more vigilant so they can catch those moments and make different choices. The final exercise in the series, on Focused Multitasking, gives them a further opportunity to notice these patterns and to change their habitual mode of operating online.

Exercise 4: Focused Multitasking

In the final exercise, students are asked to engage in multitasking with greater focus than they normally do. In the Focused Email exercise, the instructions were to keep bringing the attention back to email. Thus the element of choice was minimized: when in doubt, come back to email. But as I noted above, multitasking is different because it requires the person to choose when to shift their attention. In my instructions, I tell them that their primary concern will be to make *mindful choices* about when to stay with their current task and when to switch to a different one. I suggest that they pay special attention to trigger events—those points where some external event occurs (their phone rings) or where an internal thought or feeling arises that might lead them to switch to a different task (a desire to check Facebook or to get a cup of coffee). Their task is to notice these triggers, to pause, and then to make a deliberate choice to switch or to stay. The exercise doesn't prescribe a particular multitasking strategy (minimizing or maximizing the number of task switches), leaving this up to the individual student; it does, however, ask them to make choices that are healthy and effective, however they understand this. As in the three previous exercises, the structure of the assignment is the same: observe, log, reflect, and prepare guidelines.

What do students learn? They generally respond to this exercise quite positively. One student reports, "After this exercise, I feel it is hard to switch back to the unmindful multitasking, because I am aware of what went wrong and what went right. In addition, I would like to adopt this practice for a few reasons: (1) to be able to reduce the time I spend in multitasking; (2) for an improved quality of work; (3) effective and efficient sessions." Another says, "I think mindful multitasking in this way is a good strategy, because it can prevent me from switching tasks for no reason. Noticing and responding to the default instinct to switch to a new source of information is much more sane than following the instinct for no discernible reason, and it'll probably help with procrastination too."

A great deal of the learning seems to result from becoming more mindful of the triggers that might lead them to switch to another task: "I learned a lot about my triggers in this exercise. This seemed counterintuitive to me at first, as the multitasking observation sessions seemed like the likelier place to observe my triggers. However, mindfully staying with the trigger instead of immediately attending to it gave me a chance to more deeply understand both the trigger source and my reaction to it."

For some, becoming mindful of the breath contributes to this learning: "The thing that helped me most during this meditation was using my breath. I found that in order to be mindful of how I was feeling before I switched a task, I had to stop and really breathe. I wonder what this act alone might do for my multi-tasking stamina and alertness during times when I have a lot of different tasks to get through. I think it provides a useful way to slow my body down—almost like resting between sets of yoga moves—and to return to a state where I am again fully ready to tackle the next thing."

Interestingly, even a student who in the Multitasking Observation exercise had claimed to be a high-functioning multitasker now felt she had more to learn about staying focused: "Generally, it was very difficult for me to keep my mind on task. I rarely was motivated to switch tasks by external triggers, but my internal triggers were like little bells going off so frequently I was actually very surprised at their insistence and frequency. Alas, noticing these moments often enough to where I could make a conscious choice as to whether or not to follow my instincts was difficult, and I'm sure I only succeeded in noticing these triggers a fraction of the time."

These last two exercises give students a better understanding of their default multitasking behavior and show them how a more mindful approach can lead them to formulate a personally more effective strategy. The guidelines they draw up thus tend to address when they will multitask (and when they won't), how they will respond to (or ignore) interruptions, and how they will arrange their imme-diate informational environment (windows on the screen, apps opened or closed, cell phone on or off) in order to facilitate their new strategy.

Some Pedagogical Reflections

It seems clear that these exercises work: students report making useful discov-eries about their relationship with their digital tools, and they propose making meaningful changes to their practices. (I am unable to say, however, how many of these changes are permanent.) They regularly express appreciation for the oppor-tunity to engage in the learning process. As I continue to teach the course and to make changes to it, I also continue to reflect on the pedagogical assumptions that underlie it, and that seem to contribute to its success.

Mindful Observation Is Central

In changing one's behavior—stopping smoking, for example, or developing a healthier diet—honest observation is often the first, crucial step. Once one sees what one is doing and the effect it is having upon on one's life, the possibility arises of choosing to behave differently. The exercises I have described here fit this pat-tern: students learn first and foremost by directly observing their own behaviors and motivations. If there is anything novel about these exercises, it is the applica-tion of this process to people's online behavior.

Cultivating Curiosity and Honesty and Avoiding Self-Criticism

But observing in this way depends on certain conditions. It helps to be curious about what one may discover, and to be willing and able to observe honestly, even when what one sees may have (or be thought to have) a negative character. It is common for students to experience negative self-judgment when they see themselves exhibiting behaviors that are unhelpful, such as continually refreshing a browser despite the fact that nothing new is being revealed. I work with the students to distinguish between honest self-observation and evaluation ("oh, I'm doing such and such, and I can now see it's not very smart to continue doing this") on the one hand and destructive self-criticism ("I can't believe I did something so stupid") on the other. It generally isn't difficult for them to see the difference, although avoiding or minimizing the latter is not always straightforward.

Embracing Diversity of Views, Avoiding Judgment of Others

Much of the learning in the course comes not only from students' self-observation and assessment but from sharing what they are learning with their fellow students and with me. In the course of our discussions, students discover that different people have different opinions about the technologies and they exhibit different patterns of use. What constitutes healthy and effective use will differ from person to person, and there can be no single, universal set of guidelines for email or for multitasking.

Given this diversity of views and practices, it is important that students not leap to criticize other students' discoveries. The classroom needs to be a place not only where self-criticism is minimized but where criticism of others is as well. I try to model this behavior from the very beginning. When a student reveals something about their own online behavior (especially a form of behavior that they or others may take to be negative), I express *interest* in that student's discovery and appreciation for their honesty. And when two students begin to disagree about how something should be done online (i.e., what is the "right" way), I point out that there can be legitimate differences of approach and attitude. One size does not fit all. This approach, I've discovered, not only helps to limit criticism but helps students to recognize the diversity of approaches and opinions as real and legitimate.

Allowing Room for People's Buttons to be Pushed

Despite the care I take to avoid self- and other-directed criticism, there are moments when someone's buttons get pushed, either by one of the course readings or by a student's reflection or in-class comment. I've come to see these moments as highly "teachable," and I prepare the class from the beginning by suggesting to the students that nearly every one of them will have their buttons pushed at least once during the quarter. When this happens, the class is prepared to recognize

what is happening and, once the initial flare-up of emotion has subsided, to hold the disagreement in a more helpful and understanding light.

Recognizing My Own Biases and Limitations, and Embracing My Own Ongoing Learning

Finally, some of the ongoing work to create a safe atmosphere for honest and curious observation and reflection is my own. For, much like my students, I, too, hold strong views about the technologies—about how they can and should be used most effectively and what role they are playing, or ought to be playing, in society (Levy, 2007). My buttons get pushed too. Sometimes this happens in the exercises, when students give voice to views that I personally disagree with; and sometimes it arises when students criticize some of the assigned readings that are particularly meaningful to me. I am generally able to recognize these moments as they arise, and to use them as opportunities for self-learning and discovery as my strong emotions show me the edges of my own strongly held beliefs. These moments offer a reminder that I too am a student in the class, albeit a student with a unique and privileged status.

Conclusion: Beyond the Argument Culture

Deborah Tannen (1998) has suggested that we live in an "argument culture," in which difference is often characterized as binary opposites and pundits hold to and debate the merits of simplistic positions. It isn't hard to recognize this tendency in relation to our digital technologies, where positions are often characterized as utopian (digital technologies are our salvation) or dystopian (no, they are ruining us), and where serious, credentialed thinkers actually debate whether the Internet is making us smart or stupid (Carr, 2010; Shirky, 2010).

An alternative to engaging in such oversimplified arguments is to observe more closely what is actually happening. (Is the Internet really making *all* of us smarter, or stupider? Is it so clear what "smart" and "stupid" actually mean?) Through the exercises, readings, reflections, and discussions in this course, I believe that students come away with a much more nuanced understanding of their relationship with their digital tools. They come to see that their own attitudes and behaviors are diverse, partial, and changing, and they come to recognize that their fellow students' attitudes and behaviors are similarly diverse, partial, and subject to change. I like to imagine that if more of us could observe ourselves with greater curiosity and honesty, we would be able to engage in a broader, deeper, and more nuanced cultural conversation about the place of these remarkable tools in our lives.

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Contemplative Practices and Teaching Scitovsky's *The Joyless Economy*

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In order to make choices that lead to our well-being, we need discernment and understanding to determine the conditions that bring about positive outcomes and the awareness to recognize them in order to act in ways that are congruent with our well-being. This is a paper exploring the context of teaching undergraduates to understand the expression of their own desires in markets. In this paper, I will describe an exercise that illustrates the concepts of Tibor Scitovsky's work on well-being. Students experience the concepts outlined by Scitovsky and come to understand them more deeply through engaging with practices that allow them to directly experience the embedded ideas. In addition, once they see the benefits from closely watching their experience, they become more curious about cultivating attention and begin to inquire more deeply into the nature of their desires and actions.

Economics is often simply defined as the study of the allocation of scarce resources. The need for careful attention to "allocation" comes from the scarcity – if there were infinite amounts of everything with absolutely no constraints, we would not need to attend do allocation. However, "scarcity" doesn't exist on its own; rather, it is created through the relationship of our desires and what is available. If our wanting exceeds what is produced or what is available, then we have scarcity. In economics, the expression of our *wanting* is known as "demand" and what is available is known as "supply." Market economics studies the interaction of demand and supply. It is the study of how we manage the interaction of our desires with what is available and how we make choices. Normally, the intent of the allocation is thought of as securing the highest level of economic welfare possible, given the constraints; economics is fundamentally concerned with the nature of our wanting, the distribution of goods, and achieving well-being.

Yet what is the nature of our wanting? How do we manage our wants in the face of constraints to secure our well-being? In essence, how do we make choices? In order to make choices that lead to our well-being, we need the discernment and understanding to recognize the conditions that will bring about positive outcomes and the awareness to determine them in order to act in ways that are congruent with our well-being. This is a paper exploring the demand side of the

equation—an exploration conducted in the context of teaching undergraduates to understand the expression of their own desires in markets. In this paper, I will describe an exercise that illustrates the concepts of Tibor Scitovsky's work on well-being. Students experience the concepts outlined by Scitovsky and come to understand them more deeply through engaging with practices that allow them to directly experience the embedded ideas. In addition, once they see the benefits from closely watching their experience, they become more curious about cultivating attention and begin to inquire more deeply into the nature of their desires and actions.

In the traditional economic paradigm, the satisfaction of our desires results in an increase in our welfare or utility.[1] Even though associated with "consumer welfare," and "utility," economics is a social science most associated with tradeoffs, opportunity costs and constraints, infamously known as the "dismal science." In fact, I was not surprised to find that a search for "happiness" over the period 1975-1990 using the economic literature database EconLit yielded just 18 results. However, I was rather surprised to discover that a search for "happiness" over the period 1991-2015 yielded 2,353 results. Changes in the idea of the "quality of life" and "life satisfaction," along with a growing interest in more subtle and robust ways to think about development and standards of living, has sparked an increasing interest in subjective well-being data. Survey data on well-being has been used to test both micro- and macroeconomic theories and to estimate the impact of public policies. Upon learning of this vast literature, I wanted to explore it and teach a class that examined it.

In the spring of 2009, I first taught my course Consumption and the Pursuit of Happiness. It began as a course to examine the uses of subjective well-being data, but over the past years it has steadily moved to incorporate more of an examination of the nature of consumers' expression of desire in the marketplace. Along with psychological and economic theory, one of the key instruments of this inquiry has been guided introspection initiated by contemplative classroom exercises.

Contemplative Exercises and Economics

We want to engage our students in their learning and our teaching, yet no matter how we frame our classes, we remain the teachers, leading the students through the material and, ultimately, grading their work over the semester. The one aspect of their learning over which students are sovereign, though, is their awareness of their experience and their own thoughts and reactions to the material covered in the course. The careful examination of their private responses can be a powerful

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1   This, of course, does not mean that some measure of "utility" needs to be expressed, a notion that Pareto famously deemed a "metaphysical entity." It was Samuelson's "A Note on the Pure Theory of Consumer's Behavior" (1938) that laid out an axiomatic approach to equating underlying preferences with those revealed. For a systematic treatment of the long history of the development of "utility" in economics, see the two-part article on utility theory by George Stigler in the *Journal of Political Economy*.

ally in both student engagement and understanding. In much of formal education we understandably stress the abstract and conceptual; learning requires this powerful form of thinking. However, we have often stressed this form of learning to the exclusion of personal reflection, integration, and insight.

To be sure, many others have thought about the reform of college education. The overall success and clear vision of higher education has been brought into question by many educators, e.g., Bok (2007), Lewis (2006), and Parker and Zajonc (2010). Certainly, reform has been suggested in the past by the use of direct student experience. For example, the famous work of John Dewey and Jean Piaget and the radical reframing of education by Paolo Freire all have experiential components at the heart of their systems. In fact, whole educational systems have been built around experience. For example, the experiential learning theory of Daniel Kolb posits two sets of related inquiries: *concrete experience* and *abstract conceptualization* on the one hand, and *reflective observation* and *active experimentation* on the other. Although introspective/contemplative approaches are experiential of a kind, they are distinct in their focus on mental attention, focused awareness, and insight arising from guided introspection/contemplation/meditation.

In this paper, I focus on introspection with an example of an exercise that provokes students into an awareness of their preferences and requires them to examine their experience. In contemplative traditions, introspection has been a major source of insight, and it is beyond the realm of this essay to outline the ways in which the contemplative traditions of Buddhism, Judaism, Islam, and Christianity have fostered and developed introspection. However, in the modern Western tradition of psychology and pedagogy, introspection once had a vibrant tradition. In fact, the birth of Western psychology as a discipline came out of an attempt to gather first-person data so that theories of mind and consciousness could be moved from the realm of speculation to a more data-driven, scientific methodology.

At the turn of the 19th century, Pierre Maine de Biran recognized the essential nature of what we could call introspection, and later in the 19th century, Franz Brentano, Wilhelm Wundt, and William James all saw what James declared—namely that "[i]ntrospective observation is what we have to rely on first and foremost and always" (James, p. 185). There began a research program carried out in both Europe (in Paris under Alfred Binet and in Germany by the Würzburg school headed by Oswald Külpe) and the United States (centered at Cornell University under Edward Bradford Titchener). These research programs were based on the idea that first-person accounts provided rigorous, primary data on which the science of behavior and mind, *psychology*, could be developed. Common to all these approaches was the idea that the subjects had to be trained, in both the fineness of the awareness of their perception and its careful articulation, by the researcher or "mediator." These cautions were forgotten over time, and critiques of intro-

spective research often ignore the fact that traditionally research was undertaken only with subjects having extensive training in focused attention and introspection. (For a description of the training, see Chapter 5 in Schwitzgabel [2011]).

It is not my intent to respond at length to the large and very interesting literature about the critiques of introspection. While we need a good sense of caution in drawing conclusions from our students' reports, this does not mean that these reports are worthless. As Pierre Vermersch (1999) points out, "What is wrong about this line of reasoning is that it moves from the premise that there are facts which are inaccessible to consciousness to the conclusion that even what is accessible to consciousness is uninteresting or non-scientific, and this *a priori*, which is not only absurd but wholly unjustified" (p. 28). What distinguishes the "experience" in the exercises examined here is that it is focused on students' introspection and the cultivation of awareness. The exercises can be relatively simple and mainly conducted in their own minds. Formally legitimizing their own personal experience changes students' relationship to the material being covered. I cannot tell you how many students have nervously asked whether they could use "I" in their papers. A direct inquiry brought about through their own introspection both validates and deepens their understanding of themselves and of the material covered. These exercises can be elaborate or starkly simple—they have only to support the student in examining their own relationship to the material, framed by their own life.

There needn't be a question about how the material students are learning fits into "the real world" or is in some way relevant to their lives. Through the use of these sorts of exercises, the presentation of the material can be approached in a manner through which they can directly see how it impacts their lives. It can build capacity, deepen understanding, generate compassion, and initiate an inquiry into their own nature.

Introspective/contemplative exercises have a variety of objectives:

- building attention (mainly through focusing meditation and exercises that support mental stability),
- encouraging deeper understanding of the content of the course (through exercises designed to have students discover the material in themselves and thus deepen their understanding of the material),
- fostering compassion and a deepening sense of the moral/spiritual aspect of their education (through lovingkindness practice, etc.—contemplative practices are uniquely situated to support this sort of inquiry, and acting in ways counter to our deepest beliefs cause agitation and a troubled mind),
- dealing with contradiction and difference, (for example, exercises designed to examine our multiple identities) and
- establishing a somewhat subversive element designed to allow them to

begin an inquiry into the nature of their minds and selves. (A simple meditation focusing on the breath can quickly lead to an inquiry as to where intervening thoughts come from, the nature of our self-determination, etc. It can indeed be a profound moment for students to realize they are fully in control of neither their awareness nor their overall experience. However, this can have a dangerous element in it also; more on this later.)

In economics, we can use these practices to support students' inquiry into the assumptions and concepts behind the models that they are learning, fostering both a more holistic approach to their learning and a deeper understanding of their own experience and the material of the course.

Utility, Introspection, and Economics

The idea of focusing on the nature of our wanting has a long tradition in economics. Stanley Jevons (1888) realized that at the center of economic theory of the consumer lay the complexity of our wanting. He stated:

> My principal work now lies in tracing out the exact nature and conditions of utility. It seems strange indeed that economists have not bestowed more minute attention on a subject which doubtless furnishes the true key to the problem of Economics. (III.13)

And again,

> Economics must be founded upon a full and accurate investigation of the conditions of utility; and, to understand this element, we must necessarily examine the wants and desires of man. (III.4)

In many ways, it seems that the term for the new field of "behavioral economics" is a sort of redundancy, since market economics is the study of human behavior in markets; over 120 years ago, Jevons understood that economics was about describing behavior, specifically the behavior of the expression of our desires. As a study of human behavior managing scarcity, economics would have to study the underlying behavioral conditions of agents. In order to understand the very condition underlying all market economics, we must understand the nature of desire and its expression. Indeed, economics has a long tradition of framing its study of behavior in the empirical investigations of psychology. Late into the 19th century, as psychology began scientifically investigating behavior, it was used as the underpinning of attempts at understanding economic decisions.

It was Vilfredo Pareto who so powerfully put economics on its current track of denying any influence from behavioral sciences; Pareto was convinced that actions could be analyzed by a rational "science of logical action." However, if this were to be true, he recognized that the actions considered would have to be quite limited. Pareto constructed his political economy on two basic principles: (a) that

it should only be concerned with repeated, well understood actions, and (b) that all action is directed toward the satisfaction of tastes through the acquisition of goods, viz., that all actions must be instrumental in order to be logical.

However, it has been recognized that a very fertile ground for investigations of our economic behavior is the study of own arising desires. In their paper on the turning away of economics from psychology, Bruni and Sugden (2007) state, echoing James earlier: "In understanding the relationship between psychology and economics at this time [prior to Pareto], it is important to recognize that, in both disciplines, introspection was treated as a legitimate source of data" (p. 151). I believe that it is time to return to this source—not to the exclusion of other forms of knowing, but, rather, using introspection as complementary to them. In a real sense, all economic models are situated in behavioral assumptions about economic agents. Coming to understand these models requires knowing both these assumptions and their implications. Through the use of guided introspection, students can examine these assumptions firsthand and thus understand the economic theory itself more clearly and deeply: more clearly because they can discern the underlying principles of the models, and more deeply because they can begin to discern how the material they are studying is relevant to their own and others' lives.

In my course Consumption and the Pursuit of Happiness, before examining the way subjective well-being data has been used in micro- and macroeconomic contexts, we begin with an inquiry into the nature of our wanting and well-being. Just like the late-19th-century economists, we start with an examination of our underlying preferences. We read Kent Berridge and Morten Kringlebach's (2008) work on the science of wanting and liking ("affective neuroscience") and Ed Diener and Daniel Kahneman's work on well-being, utility, and measurement. Students begin to make finer distinctions about their preferences. For example, Berridge and Kringlebach (2008) show the importance of distinguishing between "wanting" (incentive salience processes that are not necessarily conscious as well as conscious desires for cognitive goals) and "liking" (the actual pleasure component or hedonic impact of reward, whether explicitly felt in the consciousness or not) and how the experience of pleasure is affected by cognition. This introduces the student to the complexity of both their desires and their hedonic experiences and raises the issue as to just how much control or even agency they have with respect to their overall well-being.

Scitovsky and the Tradeoff of Comfort and Pleasure

Soon after, we turn to a remarkable text that was many years overlooked by economists and psychologists but has in recent years staged somewhat of a comeback and come to be seen as a forerunner (along with the even earlier work of Herbert Simon) of "behavioral economics." In 1976, Tibor Scitovsky's *The Joyless*

Economy: The Psychology of Human Satisfaction was published. In it, Scitovsky develops the idea that as an affluent nation we have chosen a level of comfort that makes our lives end up less fulfilling and less pleasurable. While we have a great deal of static comfort to which we have fully adapted, we have little pleasure and even less sustained *joy*. Scitovsky builds on the work of H.J. Eysenck and others who believe that we seek a level of arousal that is optimal in the sense that it "gives rise to a feeling of comfort and well-being."

When our level of arousal is far under our optimum, we feel bored and uninterested; when it is too far above, we feel agitated and overwhelmed. "Pleasure" is the feeling we get from moving toward our optimum. Scitovsky points out that we should note two aspects of our pleasure: (a) that in order to experience pleasure, we must have some discomfort, and (b) that the pleasure from achieving our comfort level is short-lived. Thus, if we cling to comfort, we have no pleasure. Staying in comfort, we have no new experiences, so we have no novelty; we quickly become bored with our former "comfort" and then have to seek new ways of entertaining ourselves, often with even higher stimuli.[2] Thus, in this tradeoff between "pleasure" and "comfort" we over-choose comfort. Scitovsky's view of human well-being is not based on a single metric that rises or falls; rather, our well-being is plural, comprised of pleasure and comfort, making the satisfaction of our wants a far more complicated matter than simply choosing the option that gives us *the most* satisfaction.

An easy example of this is eating. Think of how our ancestors loved and anticipated feasts. Perhaps you are old enough to remember your own feasts. I remember them: holidays like Thanksgiving were amazing events of eating.[3] For many Americans, eating is such a commonplace that people hardly notice they are eating and do so while reading, watching television, or even driving; we, as a nation, tend to overeat. Through repeated action, we become habituated to a level of consumption—here eating—that ends up actually reducing our ability to have pleasure. The idea, though, that our *utility*, in an economic sense, is not a single, linear measure that simply either rises or falls is a more difficult idea for students to immediately understand, and one whose implications are quite important. The idea that our desires are complex and often contradictory means that at any moment in time we cannot satisfy them all optimally, since what is "best" along one measure is not the same along another. This means that simply "maximizing utility" (the basic model of the consumer for neoclassical economics) becomes far more complicated when we not only add time or uncertainty but also consider alternate

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2   People who seek extreme experiences, like skydivers, seem to require more and more stimulus in order to feel anything. See, for example, Franken, Zijlstra, and Muris (2006).

3   I moved a lot as a kid, and I remember the excited anticipation of each move because my parents would treat all the friends helping us move (including me) to McDonald's, a very special and rare event.

measures of satisfaction. At this point, it is not too surprising that students see all of this as abstract theorizing, and that, while they find it somewhat interesting, they do not see how it would make any difference to their own consumption.[4]

I point out that this approach provides a model to explain habituation, addiction and irrational, welfare-reducing choices. Scitovsky develops a mechanism to explain why, when we are so rich and comfortable, we are not necessarily happy. This stands in the face of both "more is preferred to less" and "people act in their best interest," two of the mainstays of traditional, neoclassical theory. It develops the idea that current consumption is not independent of past consumption, and it sees current consumption choices as contextual rather than simply the interplay between given, fixed preferences and prices.

Scitovsky develops this welfare trap by making a distinction between "defensive" and "creative" products, one first proposed by Sir Ralph Hawtrey. "Defensive" products defend against discomfort and directly achieve gains to visceral desires or "appetitive desires," as in the example of fast food as a quick response to hunger. "Creative" products, on the other hand, achieve welfare through more complex avenues like social interaction and creation—for example, improvising and cooking meals with friends. Pursuing defensive consumption lacks the positive spillovers of creative consumption and, in fact, harms the future possibility of creative consumption. However, defensive consumption is much easier in the short run. Creative acts require the development of skills and are usually more time-consuming; it is not surprising that, from a myopic outlook, defensive consumption seems preferential. The power of habit formation and the negative externalities of this consumption make the alternative consumption of creative acts more difficult and thus less chosen, even though it would lead to greater welfare in the long run. Essentially, the consumer is not aware of the long-run costs of defensive consumption and therefore tends toward the over-choosing of immediate comfort. Scitovsky provides watching television as a prime example. Watching television requires hardly any effort yet is quite diverting. However, staying home and watching television regularly reduces social interaction, limiting the opportunities for future interactions and hence lowering overall well-being (Bruni & Stanca, 2008). Unaware of the long-run implications of their choice to watch television (five or so hours per day for the average American), consumers become trapped and habituated to an activity that isolates them and leaves them at a lower level of long-run satisfaction.

Now, as Amartya Sen (1996, 1999) points out, Scitovsky is not proposing a paternalistic view, demanding that consumers be forced into more creative pursuits. No; rather it is consumers' lack of awareness that is the problem. Increased

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4 Economists have noted this sort of problem. As Amartya Sen (1977) has shown, we may have preferences about our preferences expressed over different dimensions that could be compared in what he has called a "meta-ranking."

self-awareness and attention to the implications of their consumption would indicate to consumers that they are pursuing boredom rather than well-being. With increased awareness and focus, consumers can use their agency to change their "preferences" and break out of habitual traps.[5] One of the prime means for consumers to learn and become more aware is in their education, especially one that includes the broad liberal arts.

For students trained in the rigors of neoclassical economics, this is a lot to swallow. Students wonder about all this and ask: why would people over-choose comfort if they would be better off not doing so? They understand the concepts but, understandably, don't have a way to map them onto their own experience, into their own lives. I have the students read Chapters 2, 3, and 4 of the *The Joyless Economy* and we discuss the distinctions and implications. Through this process, they come to a theoretical understanding of both what Scitovsky is saying and its implications—and how this relates to the research on "wanting," "liking," and addiction. We discuss habituation and the externality of comfort, along with the idea that the immediate timing of the payoff of comfort likely biases people toward it, away from the delayed pleasure of experiencing some discomfort to achieve a stimulating life. I have them write a paper in which they explore the idea of the optimal level of arousal and the paradox of the "appetizer," in which eating more could actually make you want to eat more. This conceptual examination of the text is vital to their understanding of the material and is also the ground for introspective inquiry into their own behavior.

Classroom Exercise

After my students have some analytic command of the material as outlined above, I engage them in the following exercise. With about 20 minutes left in the class, I have them settle and focus first on sound and then on their breath[6], and I ask them, "On a scale of 1-10, how are you doing right now?" I then ask them just to sit in that for a moment. Next, I tell them to gather their books and belongings and move to another part of the room, sitting next to someone they do not know. This causes a bit of discomfort—having to move and the potentially awkward moment of choosing a partner. The sorting has some starts and stops but is over rather quickly. After the students have settled, I tell them to introduce themselves to their partner. This begins a bit of talking and the energy starts to rise as they talk back and forth.

After a few moments of allowing them to meet and talk with one another,

5   Freedom and welfare are common and highly developed themes for Sen (1999). For the importance of awareness in the context of Scitovsky's work, see Sen (1996).

6   At this point in the semester, students are accustomed to doing exercises of "open awareness" aimed at developing their sense of directed attention.

I ask them again to assess how they are doing now. I next say, "OK, thank you. You've introduced yourself to the person. Good. Now tell the other person what you *want* to say to them." This causes a major reaction: nervous laughter, "What?" and other reactions of disbelief. Nobody says anything to each other. I let them sit in that for a moment and repeat the command. Again, nothing happens. You can easily feel the discomfort in the room. We all say we want freedom, but it can be a daunting state. We all want what we want, right? And we want the freedom to express what we want…or do we? Suddenly speaking seems quite daunting. Why? If you suddenly can't speak what you *want* to say, then what were you doing before?

Students quickly realize: without the tight constraints imposed by others, what will we reveal about ourselves? We believe that our wants reveal something about ourselves—their expression in markets is likely to have social/status/framing components that might have little to do with the direct object of our consumption. I also point out that our conventional introductions reveal very little about ourselves; I reach out to the student in the front row, extend my hand, shake his, and say, "Hi. I'm Dan." What have I revealed? Not much. They are now engaged directly with the complexity of their wanting and its expression.

I repeat the command once again, and, after a short time, they begin to talk. The energy quickly rises; clearly they are engaged with each other. After a bit, I ask them to again sit quietly, close their eyes, and check in: "OK, now how are you doing on a scale of 1-10?" I ask them to keep their eyes closed and let me know by raising their hands if they are worse off now than earlier. Students smile as I point out that they seem at least as well-off now as when they chose the seat for the class and whom they would sit next to. I ask them to note (like when hearing the sounds earlier, just note) what it was like for them in the last few moments of speaking with their partner: how was it to move and choose a partner? How was it to start speaking after I asked them to say what they wanted? I give them some time to journal in their notebooks, writing down what they noticed. After each exercise, I give them some time to write down their reactions, insights and questions so that they can use these notes for a paper at the end of the semester that asks them to relate the exercises to the material of the course.

As you can well imagine, students choose the same seat each class. By mid-semester, each (save one or two) has a seat that is somehow *theirs*; in fact, if someone else were to sit in it, there would certainly be an awkward moment of reshuffling. With this exercise they see, in their own experience, the sense of discomfort from perturbing their comfort, as well as starting to examine facets of their wanting that might have been obscured to them. They were sitting where they wanted to, with whom they wanted. Suddenly they were in another part of the room, seeking another partner. One of the students reported, "When Professor Barbezat asked us all to get up and sit next to someone we didn't know, my first reaction was anxiety." Another said, "It was somewhat strange and even nerve-racking

finding new people to sit next to." The exercise was designed to reveal, in their own experience, the sense of comfort from sitting in the same seat each class, then to create a bit of anxiety or discomfort by perturbing it, and then to have the discomfort ease with the finding of partners and starting to chat, as well as to illustrate the multiplicity of their wanting and the habitual nature of their choices. In experiencing these, students directly experience the ideas from the *Joyless Economy*, but I have not framed the exercise in terms of Scitovsky. The students themselves, through their experience, make this connection. Invariably, near the end of the exercise, one of the students says something like, "This is Scitovsky—you've 'scitovskied' us!"

I created a discussion forum for students to post their observations about the exercise (anonymous posts were allowed). I was struck by how many students made the connection to their discomfort and pleasure, noting how much this exercise mirrored the material in Scitovsky. In fact, many of the students found that the initial discomfort afforded them the possibility of great pleasure and a sense of increased well-being. Students reported that they quickly recognized this sense of comfort, discomfort, and pleasure. Typical of this response, a student said, "My well-being nearly doubled in a span of several minutes and the exercise reinforced that I do enjoy meeting new people, and that the initial displeasure is well worth the end result." Others made the same connection but noted that leaving comfort is risky:

> I also feel that Scitovsky's position on pleasure and comfort can help to explain some of the reasoning behind why I choose to sit next to someone I know. By sitting next to someone I know I am maximizing my level of comfort. I know the person, so I know they won't think I'm weird if I sit next to them and if there are a few minutes available at the beginning or end of class I will be able to talk to someone without having to leave my comfort zone. Whereas in speaking to a complete stranger I must first decrease my level of comfort, by making the first attempt to engage them in conversation and then potentially experience pleasure if the conversation goes well or potentially experience additional discomfort and displeasure if the conversation doesn't go well.

Students recognized how their discomfort allowed them to experience the possibility of pleasure; however, they also noted that this discomfort, if allowed, might not result in pleasure. This is an interesting insight and one not examined extensively by Scitovsky: discomfort is risky. We are uncertain what lies on the other side of leaving comfort, providing another reason for remaining in comfort even to the point of boredom. This is an important insight because not only does this link directly to the material on Scitovsky but it also helps to explain the under-

lying reason why we might over-choose comfort: the recognition that the potential experience might not go well, leaving us with even more discomfort. In fact, an attempt at moving into discomfort met with a negative outcome could make the person far less willing to take the initial risk. Even without my mentioning it, they realize that this is connected to risk aversion and expected gains.

Not surprisingly, in the class after the exercise and over the next few weeks students returned to their initial, self-assigned seats—the seats that they had chosen prior to the exercise. I pointed out to them that even though most of them said that they enjoyed sitting somewhere new, next to someone new, here in the next class and thereafter they returned right back to their original seats. They could directly experience the sense in which they would return to comfort, just as Scitovsky claimed. Did they actually prefer their original seats? Was it simply too risky—even though most had found the change positive—to try something new again? These questions arose not as abstractions but in response to their actual behavior. They had new insights into Scitovsky's observation about the potentially welfare-reducing choices around comfort.

The level of discomfort in the exercise was also raised with the command to "say what you *want*." This is an especially interesting part of the exercise for me. Immediately, students began to think what they were about to say would somehow be attributed more directly to them. The reframing of their interaction in terms of "wanting" completely changed their relationship to their partner. One student noted, "When Professor Barbezat asked us to tell our new acquaintance something that we wanted them to know, my mind began to race for something that would not reveal a lot of information about myself and still be somewhat interesting to my new acquaintance." Another said, "I think that being given the instruction to say something that you 'wanted' to tell the other person was a bit stressful. I was perfectly talkative in the first part of the exercise, but after the second instruction I felt whatever I said would be judged as something I really wanted to tell these people."

From this, students recognize for themselves that we hold wants and their expression as something deeply telling about ourselves, even though our "wants" or "preferences" are not fully in our control—they seem to simply arise. (Though certain tastes can be cultivated, if you don't like orange juice you can't suddenly decide to be the sort of person who likes orange juice…) What is the nature of our freedom and agency with respect to our preferences? What do our preferences actually say about us? Is the fulfillment of these wants really the expression of our freedom, even if what we are going after is not fully in our control? Students begin to reflect on these questions in light of their experience of the exercise.

At the same time, the students experience directly that we rarely want one unified thing. Here the student was actually afraid of what they wanted because of their simultaneous wanting to be accepted and not judged harshly for break-

ing "social convention." The stark recognition of this fact is far more powerful that simply telling the students, "We often have competing wants." One student lamented,

> I felt really nervous and uncomfortable when we were asked to tell the person something we wanted to say to them…The idea of just telling a person what you really want to tell them, especially someone you don't really know, goes against all social conventions.

Another student even had a stronger reaction,

> When asked to tell the person next to me something I "wanted" to tell them, I resolved immediately to do no such thing. Not only did I not have anything in mind at the time, but the potency of this seemingly simple request shocked me. Answering it truthfully would potentially peel back layer upon layer of social armor. Gone would be the feigned indifference and plausible deniability that permeate our daily interactions. Instead, this unknown person would gain a small window into our real selves—they would learn that we'd taken careful note of their covert nose-picking from across the room, or of our desperate desire for friends, or that we were so mistrustful of strangers that we couldn't really say anything at all.

The students were able to apply their experience to the reading, but also they were able to discover in their reactions the material of the course. In a sense, they could begin to examine the nature of their wanting and their relationships to others, now with the frame of Scitovsky's analysis. They saw how discomfort and pleasure were related, how pleasure takes a certain risk, and how their wanting is complex and often arising in a multiplicity of conflicting wants. The notion of satisfying these wants would have to address the basic question, "Satisfaction for what?" They also saw how returning to the status quo can be very compelling; in this example, they came to inquire as to why they selected the same seat. In this examination, they could see that the only way to tell whether they were choosing the same seat out of comfortable habit or out of actual maximizing behavior was the application of awareness, just as Sen had stated. Finally, they began to examine the notion that their wants reveal something about themselves. In essence, they were deeply inquiring about their wanting, all in the context of what Scitovsky had laid out. Of course, all of this was possible by their bringing their attention to their own experience, something in which, surprisingly, we have to train ourselves—as most of you know only too well!

Conclusion and Consequences

I hope this example illustrates the gains of having students reflect on their own experience in order to gain better insight into the material of the course. I chose here a simple exercise so that you could see that the set up does not have to be elaborate to stimulate reflection. The example provided focuses on three of the main motivations for using contemplative/introspective exercises: (a) increased focus, (b) deeper understanding of the material covered in the course, and (c) expanded inquiry into the nature of ourselves and those around us. In the exercise for the Scitovsky reading, the aim was to illustrate the importance of awareness for the attainment of well-being while having students directly discover elements of the reading in their own behavior. In addition, I hoped that this process would initiate an inquiry into the meaning and nature of their wanting so that they would be able to discern more subtle aspects of their actions. I believe that only through a process of direct experience can these elements be fostered.

I do want to note, though, that this sort of work is not without its dangers. Misappropriating modes from different traditions, casting students into reflections for which they are unprepared, and inappropriately therapizing or providing spiritual guidance to students and thereby blurring the role of ourselves as teachers are all real possibilities. In my course, leading students through the workings of their desires and actions can be more than simply "stressful" for them. A great deal of damage can be done without a connection to the students during the exercise. I believe that this can be developed both in the classroom through a clear attention to language; and on one's own, through a developed reflective/introspective/meditative practice and an awareness of the possible problems.

What is at stake is extremely important. Developing personal awareness in ourselves and our students is vitally important. In my field, our ability to choose effectively is being called into question. Failures of our affective forecasting, our bounded rationality and our ability to weigh short- and long-run impacts are being used to suggest that we might be better off if our choices were limited or even if others made our decisions for us. A number of popular books outline the ways in which we are "predictably irrational" and the difficult time we have in making good decisions. Writers like Barry Schwartz, in articles and his book *Paradox of Choice: Why More is Less*, are arguing that we have too much choice and that we should learn to be more satisfied with what we have. The "choice architecture" of Richard Thaler and Cass Sunstein creates an environment of "libertarian paternalism," where people are free to choose in carefully constructed environments that ensure the likelihood of certain behaviors. Daniel Gilbert's analysis of the failures of our imagination results in such grievous affective forecasting that we are better off selecting "choice surrogates" that provide answers to what we should do based on their own experience. Finally, the neuroeconomist Colin Camerer's cautious

praise of paternalism, in limiting our choices due to our inability to negotiate the subtleties of the differences between wanting and liking, supports the idea that we are, again, better off turning over our agency to "agencies." [7]This entire movement seems to concede that it is better if we simply admit to our limitations and turn our choices or the environments in which we choose over to "experts" who know better than ourselves. I believe that this is a dangerous movement and that, rather than look for solutions outside ourselves, we must develop and nurture our abilities of personal awareness and introspection. While of course there are situations in which we might want to turn to experts or limit our choices, we, ourselves are the only ones who should determine when and to whom we should turn. Knowing these things requires a good deal of self-knowledge. Rather than take our limitations as a given, I believe that we can develop our skills at introspection and personal awareness.

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7   See for example, Barry Sshwartz, (2004) *The Paradox of Choice* New York, NY: Harper Collings; Richard Thaler and Cass Sunstein, (2003) "Libertarian Paternalism," *American Economic Review 93, 175-179;* Daniel T. Gilbert et al, (2009) "The Surprising Power of Neighborly Advice," *Science* 323, 1617-1619; *Colin Camerer (2006) "Wanting, Liking and Learning," University of Chicago Law Review* 73, 87 – 110.

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Contemplative Environmental Studies: Pedagogy for Self and Planet

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Environmental problems are among the most profound challenges humanity has ever faced. How can we best educate students in this moment of environmental intensification? What skills, virtues, and sensibilities do they need to investigate, appreciate, and respond to environmental degradation? This article makes the case for adding contemplative practices to the pedagogical toolbox. It explains the connection between our internal lives and environmental degradation, and how contemplative practices can unlock faculties for advancing environmental inquiry and engagement. It describes how contemplative practices can, for instance, help students analyze the causes of environmental harm by enabling them to notice internal grasping, and fashion appropriate responses by short-circuiting reactivity and attachment to specific outcomes. The article also argues that, while contemplative practices can help students (and professors) better address environmental issues, environmental engagement can also benefit the contemplative life. Climate change, mass extinction, and other environmental dilemmas represent novel challenges to our species and thus addressing them may open new chambers in the heart whose exploration can deepen one's contemplative experience. In addition to pointing out the benefits, the article also notes limitations of using contemplative practices to expand environmental studies.

Humans have always had trouble living lightly on the planet. The first farmers of ancient Mesopotamia used irrigation methods that led to soil salinization; the Romans practiced forms of metallurgy that polluted the waters; and the Mayans deforested and overworked so much land that they could not produce enough food for their growing numbers. In his book *Collapse*, Jared Diamond (2004) catalogues whole societies in the past that overshot the carrying capacity of the land and thus vanished from the Earth. Living ecologically sound lives appears to be a perennial challenge.

Something new has emerged over the past century that has fundamentally upgraded the intensity and scope of our environmental difficulties (McNeill 2001; McKibben 2011). Massive increases in human population, affluence, and technological capacity have conspired to remake humanity into a planetwide ecological force in its own right. Today, humanity's signature is everywhere. We mine the Earth's

crust, fish its oceans, reroute rivers, fly through and pollute the sky, and otherwise inflict ourselves deeply into and across the planet—and do so with increasing power. As a result, today we are not simply tinkering with the Earth's ecological features or pressing the conditions that support human societies in particular places, but altering the fundamental organic infrastructure that supports all life on Earth. We see this most expressively in global environmental dilemmas such as ozone depletion, climate change, and loss of biological diversity, but also in regional contexts in the form of fresh water scarcity; increased toxic contamination of air, water, and soil; and resource exhaustion. Humanity is no longer one species among many but is now the dominant species on the Earth, largely responsible for the planet's ecological fate. Many have noted this by designating the current geological epoch as the Anthropocene: the age of humans.

How do we best educate our students in light of our environmental predicament? What skills do they need in order to investigate, appreciate, and respond to the degradation of the Earth's life support system? How do we work with students to develop a meaningful understanding of this, and prepare them for living in a world where massive environmental decay is the modus operandi? What should pedagogy look like in the Anthropocene?

In many ways, higher education is already doing a relatively fine job, especially given the short amount of time since colleges and universities have chosen to focus on environmental dilemmas. Environmental studies is a growing, multidisciplinary line of inquiry that includes the natural and social sciences, arts, and humanities; and programs are sprouting up at universities around the world focused on various aspects of ecology, sustainability, and environmental affairs. Our students are thus learning about the biophysical, sociological, political, economic, philosophical, and artistic dimensions of environmental challenges—to name just a few. And, in the best cases, they are developing such knowledge into a personal understanding of the global environmental problematique and translating it into technological, political, economic, and social skills aimed at addressing our most pressing problems.

For all its virtues, however, environmental studies still needs to grow, and this article makes the case for growth in a particular direction. It calls for including contemplative practices—journaling, meditation, yoga, and other techniques for self-reflection and concentration—in the classroom to help students (and professors) negotiate their way deeper into environmental challenges. Environmental problems are among the most profound issues humanity has ever had to confront. They call into question not simply our technological, economic, and political capabilities, but also our fundamental understanding of who we are as a species and how we fit into the broader, more-than-human world. As I hope to show, contemplative practices can help awaken and cultivate the ability to bring one's whole self to environmental challenges. Students (and professors) are complex beings with bodies and hearts as well as minds. Contemplative practices offer ways of bringing whole-person education to environmental studies.

In the following, I make the case for contemplative environmental studies by relating my experience with utilizing contemplative practices in the classroom. I teach Global Environmental Politics. This involves explaining the causes of environmental harm and exploring meaningful ways of responding. Over the past decade, I have introduced various contemplative practices to deepen students' appreciation for the profundity of environmental challenges and find ways for them to connect more holistically and personally with the discipline. In doing so, I have made many mistakes. Sometimes I was overly zealous, other times too timid; in some classes I could not always hear the needs of my students, while in others I too easily jettisoned practices when I sensed resistance; and in every instance I struggled to be as skillful a steward of education as I could be. Through it all, I also learned a lot about myself as a teacher, the nature of environmental study, and, perhaps most importantly, productive ways of engaging environmental issues. In this essay, I relate parts of the journey. In doing so, I should say at the outset that contemplative practices have not solved all my teaching challenges and certainly have not laid out a singular path to environmental well-being. They have, however, made teaching more meaningful and opened up powerful pathways for students to care about, study more intensely, and take action to advance a more just, more humane, and greener world.

I

Introducing contemplative practices into the classroom is not simply a pedagogical choice. In truth, it is a vocational one. I went into academia because I wanted to live a life of inquiry and share the experience of intellectual exploration. The universe is a big place. What better way to spend one's time than to use each day to understand another corner of it and talk meaningfully about this with others? I also entered the academy to figure out how best to respond to environmental degradation. I was floored as an undergraduate student that so few people seemed to be "figuring out" how to solve environmental dilemmas. Yes, many people were trying to protect the environment, but it seemed like they were working without a broad blueprint or guiding insight. The academy promised a place where I could put my head to the grindstone and answer the environmental problematique.

Through the years, intellectual engagement has certainly excited me. There are few joys more powerful than riding thought into new terrain and seeing the world in new ways. The life of the mind is a powerful and exhilarating dimension of human experience. Furthermore, trying to understand and respond to environmental issues has been fundamentally important in my life. I cannot imagine living without spending significant amounts of time and energy engaged with cracking environmental dilemmas. However, whether it is age or insight, I have also seen the confines of such endeavors.

Like others, I have learned the limitations of intellectual life. Knowledge is not simply the accumulation of facts, development of theories, or processing of analysis. It also involves extrarational capabilities that go beyond the intellect. These include intuitive flashes of insight, emotional upwellings, inarticulate but expansive senses of awareness, and compassionate sensitivities. Too often, academia belittles these ways of knowing, shunning them as the merely subjective dimension of human experience. Furthermore, academia's exclusive focus on the rational mind ironically curbs possibilities for knowledge to the degree that it circumscribes education to information and privileges erudition. In doing so, it brackets inquiry into the relationship between knowledge and wisdom, and thereby dismisses a key context for exercising the intellect or amassing facts, models, concepts, and ideas. Over the years, like others, I have come to see that extrarational capabilities need not be excised from our academic endeavors. In fact, they can fortify our academic efforts by expanding understanding about what counts as knowledge and enlarging the parameters of our methodologies. As I will explain in a moment, contemplative practices have provided necessary modalities for doing so.

I have also seen the limitations of trying to find the "answer" to environmental issues. There are, of course, engineers, policy makers, and practitioners of all sorts who are developing ways to avoid particular instances of environmental harm. These are important efforts. But it is also clear that addressing humanity's place on Earth, or understanding how we can live genuinely ecologically-sound lives, or building more just and sustainable regimes are not simply puzzles in search of solutions, but perennial challenges that assume different contexts at various historical moments. Put differently, environmental problems are not simply technical dilemmas, but existential conundrums. They demand and engage our entire sense of self and species. I have thus come to see my desire to "solve" the environmental dilemma as hubristic. Answering it is like solving life itself. There is no resolution; there are only responses and engagements that can make it more or less meaningful. One of the reasons I enjoy contemplative practices—both personally and in the classroom—is that they can lift one out of a singular problem-solving mentality and open up expansive orientations for responding to environmental challenges. Responding—and thus taking on responsibility for environmental dilemmas—is to live conscientiously, and this demands more than so-called academic understanding.

Introducing contemplative practices into the classroom is vocational for another reason. Like perhaps many, I have often felt that I live parallel lives. On the one hand is my professional career as an academic. This involves research, teaching, publishing, and being a responsible and contributing member of my university. It also includes building the larger discipline of environmental studies and playing the role of a public intellectual that can bring scholarly insight to environmental

affairs. On the other hand is my personal, interior life. This involves what many would call my "practice" (which is just a shorthand word for contemplative engagement). I am a longtime yoga practitioner and have had a steady, daily sitting meditation practice for years. I am actively involved in a Buddhist *sangha* (community) and spend much of my time reading, thinking, writing, and conversing about the quality of the inner life. For years, I kept these two lives separate from each other. To be sure, I would certainly talk about interior explorations with students and colleagues, and I would write largely from my heart when publishing scholarly work, but when it would come to mediation, yoga, or my various forays into the spiritual dimensions of life, I found myself hesitant. While I would not hide my practice, neither would I advertise it. I was, to use Parker Palmer's (2009) phrase, a "divided self." Bringing contemplative practices into the classroom, then, is a type of coming out or, more accurately, coming full circle. It allows me to share what I most care about and what I take to be the foundation of the information, concern, and analysis I teach.

I should add that by bringing contemplative practices to the academy I also feel that I am enabling the university itself to come full circle and assume a less divided identity. Colleges and universities originally emerged out of monasteries, madrassas, yeshivas, and other places of religious learning. Higher education, as such, involved retreating from the world of commerce, material productiveness, family life, and political engagement to reflect on the fundamental meanings of life and work out one's destiny with diligence and in community. While such schools were certainly tools of political power, and served economic and social interests, at their core was at least an intention to facilitate a person's journey through life in relation to "transcendental value" (Dworkin, 2013, p. 12). Practices, texts, teachers, and communal experience paved the way for one to contemplate fundamentals and to go through one's days in sustained reflection about the ultimate storylines of the cosmos. Monasteries, madrassas, and so forth were, then, places of interior investigation and discovery. The inner life was given special privilege—even if, at times, it was dictatorially imprinted upon—and cultivated as an important component of a meaningful life.

Today's colleges and universities continue this tradition to the degree that they prize the so-called "life of the mind." Indeed, universities are fundamentally about ideas and the cultivation of critical thinking. Much of higher education is animated by a commitment to educate students' minds for the sheer sake of expanding their appreciation for the many dimensions of life and ushering them into a civilizational celebration of human knowledge and achievement. Yet we would be blind if we didn't notice how this core mission has shrunk within the academy and how its purpose is constantly being questioned. Reflection and internal development for their own sake are often assuaged in academic curricula, strategic

plans, and university goals, especially as professionalism, corporate sponsorship of research, a commercial spirit, and governmental imperatives are increasingly influencing the academy. With such diminishment, the places of personal reflection, wonder, and inner growth have become attenuated. More and more, universities are schools of professional training and socialization rather than contemplation.

One would not want to exaggerate the consequences of using contemplative practices in the academy, but doing so is at least a gesture toward reinstilling or at least bolstering the self-reflective, pondering dimension of higher education. To be sure, introducing contemplative pedagogies is not an effort to turn universities into monasteries. There were good reasons why colleges and universities *grew out of* religious schools of learning. Rather, it is simply to sharpen the authentic pursuit of understanding and provide an expansive set of tools for doing so. Contemplative practices can thus reopen questions of what counts as knowledge, the purpose of education, and the place of the self in scholarly inquiry. As such, they can serve partly to reintegrate the various elements of higher education's historical identity.

II

For years I have taught a course titled International Environmental Politics. The class introduces students to the litany of environmental problems and studies how the international community is largely failing to respond in effective ways. The course, like many similar ones taught around the world, is a downer. Few smile as we progressively move through ozone depletion, mass extinction, climate change, and all the rest. In fact, students have renamed the course "Introduction to Doom," for each week we study yet another assault on life.

Students take the course not to get overwhelmed but to figure out how to change things. They want desperately to know how the international political system works so they can identify the key levers of power to shift environmental affairs. I share, of course, their interest, and I work along with them to find such insight. What is abundantly clear from such inquiry, however, is that we always look "out there" to find the political steering wheel. That is, we repeatedly search the array of international institutions, nation-states, corporations, development strategies, and technological movements for political succor. Rarely do we look inside, as it were. Seldom do we entertain the idea that there is an "inner ecology" as much as an outer one, and that the former may also play a role in global environmental degradation.

What does it mean to turn inward to understand environmental affairs? What are the internal steering wheels and how can one get a handle on them? For one thing, such turning provides an invitation to explore the capillary level of environmental harm. Environmental problems arise because corporations seek profits over collective welfare, states compete over natural resources, most peo-

ple believe that the natural world is here for the taking, and few of us can generate the moral fortitude to extend concern to those living at the receiving end of environmental harm. But, along with all of this, environmental problems are also more simply the result of people consuming too much stuff and not caring about the consequences of their material intake. If people consumed less, our ecological woes might not disappear, but they would certainly diminish. A turn inward helps us get a handle on this dimension of the issue. It allows us to identify and focus upon the fundamental impulse to want material things. What is it that impels us to crave something? What is it that moves us toward greater accumulation? What is the quality of our material desire? Inwardly-directed contemplation enables us to see some of the dynamics involved and begin to question how much we need to be instrumentalized by them. (This is not to say that all material consumption is bad or that the concept of consumption itself is fundamentally at odds with environmental sustainability. Rather, it simply suggests that casting some light on our own internal hunger can help unpack the juggernaut of consumption and lead to insight about different forms or experiences of material engagement.)

A second benefit of turning inward is less about analyzing the causes of environmental harm and more about how we can respond. Too much environmental activism is reactionary in the sense that it often responds to immediate circumstances. Many activists, for instance, find themselves angered and lash out as they learn of environmental assaults. There is, of course, nothing inherently wrong with anger. It is, after all, a human emotion, and, moreover, it can be an important indicator that something is unjust, exploitative, or hurtful. But it can also be a dangerous weapon. Quick-tempered anger can sometimes blind one to creative and appropriate responses as one is caught in the fury of the moment. Furthermore, if widely practiced it can lead to polarization, as stakeholders square off across an "us/them" divide.

Many contemplative practices aim not to get rid of anger per se, but to slow down the reaction process. The famous remark "Don't just do something, sit there!" captures the gist of this. The idea of many contemplative modalities is to bring the practitioner to the present moment in a way that absorbs an immediate stimulus into one's broader experience. The result is that one then has a wide array of internal resources with which to respond and, more particularly, a moment of calm within which anger can be understood and, ideally, turned into discernment and then appropriate action. To be sure, such contemplative practices are not panaceas that can dial up the perfect response. But they can help to create more space within which to make skillful judgments.

Along with this, some contemplative practices can also relieve activists and others of an unproductive sense of urgency associated with environmental campaigns and thus enable people to engage with issues over the long run. Many environmentalists suffer from burnout. They invest themselves so fully in a particular issue or work so tirelessly and frenetically on a set of contemporary challenges

that after losing a few battles they find it hard to go on. The landscape is littered with former activists who have left the battlegrounds to go home to spend time (sometimes the rest of their lives) licking their wounds. A turn inward does not alleviate burnout but can offer a sense of perspective on what is at stake.

Joanna Macy (2012) recommends certain practices that help provide a wider timeframe for activism. Taking the longer view lets one see that environmental engagement is not a series of battles but a way of life, and one filled with a combination of sorrow, joy, disappointment, and achievement. Macy suggests, for instance, remembering that life on earth is roughly 3.5 million years old. In geological time, this may not seem like much. In terms of tomorrow's environmental action, it is light years. Macy also suggests that contemplative practices, such as certain meditation techniques or exercises that allow us to reflect on whales, tortoises, and other "old" species, can enable us to feel an affinity for the long duration of life, and this can provide some breathing room for our environmental efforts. (Such an affinity can also change our perspective when someone insists that we "act our age.") It is important to understand that Macy is not saying, "Slow down, don't worry, in the grand scheme of things all will be okay." Rather, she is simply reminding us that our lives are part of a larger process and that, when we align our efforts accordingly, we can sustain ourselves through campaign after campaign.

There is an additional element to the long view. Many activists get caught up in a specific environmental campaign and feel that their efforts are meaningless unless the campaign is successful. This, of course, is reasonable enough. There are real objectives out there, and environmental protection feeds on actual goal-oriented action. Contemplative practices that instill a sense of the long view allow one to distinguish effort from achievement. Now, this may seem perverse. Why shouldn't I get attached to the goals of my efforts? This is a complicated question, but the short answer is that such attachment breeds a contingent sense of well-being. It suggests that I will only be satisfied, happy, or enriched if I achieve a certain state of affairs. However, this is often impossible. It doesn't take much to notice that environmentalists, for all their beautiful and hugely important efforts, have lost more battles than they've won. By concentrating on a particular outcome rather than one's effort, one's anticipations can only get squashed in moments of campaign defeat. Certain contemplative practices can help separate commitment from attachment to victory and thus assist in developing more skillful activists.

In short, inward contemplation can offer resources for cultivating a richer interior life and, in so doing, assist environmental efforts. Everyone knows that one's inner life affects one's outer engagements. In the most basic way, if I am angry, I tend to see an unpleasant world and bring such a sensibility to my actions. Alternatively, if I am feeling joyful, I tend to see a more promising world and bring this to my engagements. In the same way, contemplative practices can help us untangle the internal dynamics that animate our efforts. In these ways, coming to

know oneself more fully—or, pejoratively, "working on oneself"—is a boost to environmental efforts. Environmentalism needs a turn inward.

On the flipside, contemplation also needs environmental engagement. One reason people care about environmental issues is because things like freshwater scarcity, climate change, and loss of biological diversity are not simply outer phenomena but also occurrences that get inside of us. They breed feelings of loss, sadness, lamentation, and so forth. (Similarly, positive environmental experiences generate sentiments of joy and awe.) This simply underlines the two-way relationship between our external and internal lives. At a higher level of abstraction, however, it also clues us into the more general interior/exterior relationship.

We often talk as though contemplative practices and insights into our internal lives are completely free from the social world. Meditation, yoga, journaling, prayer, and so forth are frequently presented as avenues into the "absolute" dimension of life—and thus as trans-social and transhistorical. It is as if, once we close our eyes or focus mindfully on bodily movement, we enter a boundless world that resonates with the ultimate elements of life itself. But we know that this isn't true. In fact, the very techniques we use to "go inside"—particular forms of meditation, movement, and so forth—are themselves sociohistorically constructed. They were devised by people at certain times and in certain places, and they have this character no matter how profound the experiences they produce may feel. Indeed, the very sense of self that contemplative practices aim to activate is itself a sociohistorical construction. There is no inside that is completely separate from the outside world.

But this is all theoretical. Coming back to environmental issues, this suggests that our own spiritual development, our own cultivation of a contemplative life, is partly dependent on environmental conditions. And this is where the real rub of contemplative environmental studies can assume even greater significance. We live at a time of extreme environmental degradation. If nothing else, climate change confronts us with the most challenging of predicaments. Today, everything frozen on Earth is melting; record-breaking wildfires and droughts are scorching the land; intensified storms are wreaking havoc throughout the globe; and innumerable species are at risk or already extinct due to anthropogenic climate change. Witnessing this—coming to know it in an intimate and engaged way—is a profound experience. And this can provide grist for the spiritual mill. Climate change is arguably opening up chambers within the human heart that have never existed or been explored before. The idea that our species is causing the massive ecological deprivation, for instance, can generate feelings that no human beings may have ever experienced before. The profound sadness that can accompany deep awareness of climate change, the sense of love for all that is at risk and disappearing, the visceral feeling of interdependence that is emerging as we watch

our fellow humans and other-than-human companions suffer in the face of climate change, and our feelings of awe as we generate collective efforts to combat climate change—the depth to which these are felt and the quality of that experience may be unique to our time. This suggests that environmental problems can be tools of contemplative practice. They can be invitations to get to know ourselves in deeper ways and to strengthen our interior experience. Put differently, environmental issues are not simply dilemmas that we must confront externally or soldier through. They are also opportunities for growth and self-knowledge. They are avenues toward more sensitive and aware selves. The human spirit may actually expand and deepen in the ecological age. At least this is one element of the contemplative/environmental interface.

To summarize: a contemplative orientation to environmental studies offers an invitation to see our inner evolution as connected to the well-being of the Earth. It allows us to come to know ourselves more insightfully and enlarge our consciousness more expansively when challenged, by thinking about the Earth and our place in it and by acting in the service of environmental protection. It goes further, however, by advancing the proposition that our fellow humans, other creatures, and the Earth as a whole are best served when we indeed engage in such inner work and come to the task of environmental protection from a place honed by contemplative practice. That is, we advance environmental well-being most successfully when we possess (and continually develop) an appreciation for the complicated nature and richness of our inner lives.

III

I use contemplative practices in quite a number of courses. I use them most consistently, however, in two classes that I have been teaching over the years: Contemplation and Political Change and Contemplative Sustainable Design. Let me describe both of these and the practices I employ.

Contemplation and Political Change investigates the nature of political action. How can one most effectively bring about meaningful change? Does it come from altering structures of power—governmental policies, international organizations, social institutions—or one's own outlook and behavior? The question is a perennial one, but I try to approach it in a way that allows students to feel its resonance in their own lives and at this particular historical moment. I do this by tying it to environmental concern. The course's fundamental inquiry, then, is: how can I best make the world a greener, more just, and more sustainable place?

Students practice three kinds of change. First, they work for external, institutional change. Here I require them to write three letters to the editors of newspapers or magazines, meet with officials, and lobby their congressional rep-

resentatives to advance a particular political goal. (Living in Washington, DC, students can easily make appointments and meet with congressional legislative aids or even, at times, representatives themselves.) Second, I ask students to adopt lifestyle changes that are in line with their political aspirations. This may involve altering one's diet, walking to the university rather than traveling by a fossil-fueled machine, or consuming less stuff. In this case, I ask students to alter their lives for a specific, circumscribed period of time (usually two weeks). This allows them to make and stick with a commitment (rather than attempt to change things "forever" and thus have to excuse themselves for lapses in commitment). Third, and most abstractly, I ask students to alter their personal understanding of the challenge they are addressing. Here the idea is that, since students will not "solve" a problem like climate change, loss of biological diversity, or freshwater scarcity during the semester, they need to come to terms with stymied efforts. How does one do that? Do they throw up their arms and become cynical, do they simply put their shoulder to the grindstone and keep trying, do they see other avenues toward which to devote their efforts, or do they adopt a different outlook altogether? The challenge in this third dimension is to explore how our ideas and understandings can also play a role in political change.

Along with these strategies, we engage with contemplative practices. As a class, we practice community tuning, meditation, yoga, and journaling. I start each class with a check-in. This involves going around and hearing briefly from each person about what is most alive for them at the moment. At the beginning of the semester, students usually share an exciting or disappointing experience; midway through, they begin to talk about immediate emotions or sensations that are currently animating their moment-to-moment experience; by the end, most feel safe enough to share as honestly as possible. The check-in is so regular that students come to expect it and, over the semester, find increasingly more skillful ways of listening to each other and sharing more deeply. One of the goals of the practice is to enable us to appreciate each other's experiences without trying to fix another person. Another goal is to gain a sense of where the class as a whole is on a particular day. The check-in, in other words, helps "tune" the class.

At various points in a class, we do sitting meditation. This is a challenging practice to share. In the beginning of the semester, we simply close our eyes together and explore the sensation of doing so. As the semester progresses, I give additional instruction that allows students to investigate their internal experience in different ways and at different depths. The main form of meditation is simply mindfulness. I invite students to watch themselves. This involves bringing awareness to our bodies, thoughts, breath, and awareness itself. For most of the semester, meditation is a form of concentration. We work with the wandering mind and find ways of bringing it back to a particular focus. To help students overcome a sense of self-consciousness, we practice by sitting in a circle but facing outward,

away from the center of the room. This way students don't feel that others are looking at or judging them. It also allows those uncomfortable with closing their eyes to participate.

We also practice yoga. Usually, this comes at the second half of each session. About halfway through a class period, we will take a break in which students change their clothes and rearrange the room so we can put down mats or simply make space. (Most students do not have mats and thus practice simply on the carpet.) Most of the yoga involves postures known as *asanas*. I introduce different poses and eventually work toward a series of postures that students can experiment and begin to feel comfortable with. I emphasize how the body is a faculty for knowing and introduce yoga as a form of inquiry. This involves not simply coming to know the body and toning it for greater sensitivity but also integrating the knowing mind into its material vessel. Furthermore, yoga powerfully shifts the intellectual quality of the class and invites students into an alternative approach to inquiry.

A final regular practice is journaling. Students are required to keep a journal and write entries four days a week. I assign *The Book of Awakening* (Nepo, 2011) to provide daily, voluntary prompts for each entry. The journal is a place of freewriting. Students can write whatever they want. This often includes personal things that they may wish to keep confidential. (In these cases, I ask students to indicate with yellow stickies those parts of the journal that I should not read.) The purpose of the journal is to give students the feeling of a steady practice and allow course material to surface in personal ways. Put differently, the journal provides a way for students to personalize their education. It serves to tell them first that their own thoughts and feelings are valued and second that those thoughts and so forth are part of the educational experience. They learn that they can write themselves into insight and understanding. Journaling is a form of integrative learning.

I use tuning, meditation, yoga, and journaling for at least three broad purposes. First, the practices cultivate concentration. Students arrive in class having had various experiences in their day and animated by issues tied to the larger arcs in their lives. It is difficult to organize oneself and transition to the classroom; it is challenging to be immediately present to what is happening in class. The practices help us individually and as a class to "arrive" and attend to the material at hand. They work against the distracted mind that is encouraged by cellphones, Facebook, Instagram, Snapchat, and Twitter. Allowing students to share their immediate experience, focus on their breath, mindfully move and experience their body, and self-reflectively express themselves through freewriting works to induce concentration.

The practices also help students confront uncomfortable (political) realities. If economics is the dismal science, environmental studies is the horrific one. Environmental degradation involves gross injustices and ghastly ecological tragedies.

Often these are hard to look at and even harder to analyze and develop responses to. Each of the contemplative practices I use in class helps students turn their gaze toward such difficulties. For example, by learning of others' hardships, trying to focus on the present moment, no matter how painful, and experiencing soreness as they position their bodies in different asanas, students learn ways of facing the seemingly unfaceable. The practices assist students in, to use dance choreographer Liz Lerman's phrase, "turning discomfort into inquiry."[1] And as students learn to do this with their own sensate and emotional experience they can do so with environmental challenges as well.

A third benefit of the practices is to promote flexibility. Yoga obviously does this for the body. Throughout the semester students experience increasing levels of suppleness, and this can often teach them to let go of preconceived boundaries to their bodies. By extension, and along with the other practices, it can also help them to let go of conceptual restrictions. All of us suffer from what could be called "hardening of the categories." This is our attachment to certain viewpoints or assumptions that then color our experience—including our engagement with environmental affairs. Contemplative practices can soften the edges of our categories and open up broader views and understandings. This can be especially helpful for environmental studies insofar as it can inspire creative thinking and a sense that no problem is forever set in stone.

Along with this is the opportunity to work with resistance. In yoga, one consistently comes up against bodily edges—hamstrings that won't budge, backs that won't bend, and stiff shoulders. In tuning, people have to listen to unpleasant things; meditation offers the chance for internal discomfort to surface; and journaling often uncovers painful states that many wish to avoid. How does one approach such edges? In addition to turning them into sources of inquiry, one can also learn ways of engaging them. For instance, does one barrel through resistances, or pull back, or dwell on their interface? As one comes to know his or her habits through contemplative practices, one can apply lessons learned to environmental political affairs. Every environmental political campaign, at some point, meets resistance. Rarely does everyone agree on a given strategy of change. Contemplative practice allows students to come to such situations with internal resources that can help them navigate the realities of political opposition and even confrontation.

While I am aware of some of the rewards of the contemplative practices I use in class, I also know that their consequences are hard to predict. They may have the effects I just mentioned, but then again, they may not. Moreover, I am sure they influence students' lives beyond my intentions. I say this because I, myself, continue to learn about practice. So many times I find myself redefining the ben-

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1   http://danceexchange.org/toolbox/foundation9980.html?Line=6

efits I receive from contemplative practices. So often I come to understand and appreciate another dimension of practice. Thus, it makes sense that, over time, students will do so as well—beyond anything I, as their teacher, say or anticipate. In this sense, I often see introducing yoga, meditation, and so forth as simply a node in a student's (hopefully) long engagement with contemplative practices. Most students will not sustain the practices I introduce in a linear fashion but will probably circle back to them as different acquaintances in their lives reintroduce forms of contemplative inquiry or as they themselves seek such development.

IV

The effects contemplative practices have on students are not only hard to predict but occasionally can backfire or, more accurately, create resistance. Let's face it: bringing practices to the classroom is a risk. Students come expecting to be talked at or to engage in seminar-like discussions. They are unprepared to do things like close their eyes, move their bodies, share intimate struggles, and personally self-reflect in the context of academic study. Contemplative exercises can thus come off as flaky, corny, or even religious. When this happens, students can close up and refuse to avail themselves of the pedagogical possibilities. I found this a few times. It happened most profoundly while I was teaching the course Contemplative Sustainable Design.

Contemplative Sustainable Design is a three-week summer course that I occasionally teach at the Lama Foundation in the mountains of northern New Mexico. The Lama Foundation is an ecumenical spiritual community that hosts retreats and serves as a place where many people over the years have sought personal awakening. Students sleep in tents and share some community responsibilities while building solar-powered straw-bale structures and learning about global environmental affairs. For two summers, the course went beautifully. Students enjoyed living close to the land, gaining building skills, sharing deeply through contemplative practices, and interfacing with the Lama community. However, in the third year, things hit a rough spot. About a week into the course, some students felt that there was an overemphasis on contemplative practices and that the experience was aiming to make them "spiritual." About half the students felt like they were being indoctrinated into meditation, yoga, and other practices, and expressed this in no uncertain terms to me.

Like other teachers, I am particularly sensitive to student experience. I want everyone to feel as though they are learning things of significance and in ways that feel life-affirming. Thus, it hurt when students expressed dissatisfaction with the course. At first, the experience made me reflect simply on dynamics of the

course: what could I change to smooth things out? But soon I started doubting the entire wisdom of using contemplative practices in an academic setting. I remember feeling that the course was a mistake and that the whole effort to integrate contemplation into the academy is misguided.

For all the pain, the experience proved to be an extraordinary learning experience for the students and especially for me. When students first approached me with complaints, I set aside designated time and allowed each to speak as honestly as they could. Each worked to find words to express their discomfort and connect their disappointment with the course to their life goals. I worked to practice deep listening without reacting. I tried to really hear them—to look beyond my hurt and see the discussion less as an attack on the course or me, and more as an insightful conversation in which real issues could surface. I tried my hardest to listen in a way that made them feel heard (and to really hear). Over the next few days, we unpacked the conversation and tried to integrate it into the course material. For my part, I learned that, as a teacher, I have a huge urge to be liked. I want to present material that is interesting to students and to do so in a way that puts me in a favorable light. This was an important insight. It helped me see how, in my life more generally, I strive to be a "pleaser"—one who can make others happy.

When my students expressed unhappiness, I was forced to think about the purpose of education and my particular role in it. Among other things, I came to see that the classroom is not about being liked or even making students comfortable. It is about learning, and some learning can be painful—for both the teacher and student. I began to notice the degree to which I partially "perform" in class. I saw levels of inauthenticity as I cooked up ways of presenting material or discussing issues that aimed not only to elicit insight from students but also to display pedagogical talent on my part. It was a rude awakening. I tried to milk the insight by taking my own advice to turn discomfort into inquiry.

Now, I relate this incident not to bring attention to my insufficiencies as a teacher and my luck at having rebounded in a productive way. Rather, I think it reveals something about contemplative pedagogy. Accurately or not, many associate contemplative practices with religious traditions, and this can scare students insofar as many hold personal spiritual or religious sentiments—even atheism—in protective ways. Contemplative exercises rub up against such sentiments and, because the academy is conventionally not a place to explore or discuss our most personal beliefs, students can feel threatened and uncomfortable. This is almost unavoidable. Furthermore, contemplative practices may seem anti-intellectual and thus trite to many students. The cost of higher education is so expensive these days that students may feel contemplative practices are a waste of their educational time. This is especially the case when the effects of the practices are hard to gauge and difficult to communicate on term papers, examinations, and other measures of academic facility.

These concerns relate to a more general dimension of contemplative pedagogy. No matter if students are excited, scared, or indifferent to contemplative exercises, practices can open space for vulnerabilities. By going beyond the purely rational mind, they expose raw parts of ourselves that may not always be welcomed. And, since few of us are trained academically to work with the expression of vulnerability (either our own or that of our students) in a classroom setting, this opens up new educational terrain. In the face of such difficulty, many of us may be tempted to discard the whole effort—to go back to being intellectual talking heads who can take control of the classroom by lording our knowledge over that of our students. As I learned, this would be a mistake. The forms of uneasiness that can accompany the use of contemplative practices *themselves* provide pedagogical value. They introduce a type of wildness into the classroom where people can feel their edges and learn themselves into new understandings and, by extension, ways of being in the world.

The promises and difficulties of contemplative teaching bring into high relief the fine line between our roles as teachers and the experience of our wider lives. For many of us, the line serves partially as a divide between professional and personal life. Contemplative pedagogy invites us to attenuate the boundary. It suggests that we can live with greater integration by arriving in the classroom as whole as possible, thus facilitating whole-person education. This is especially important in environmental studies. Sadly, no one knows how best to address environmental challenges; environmental studies, in this sense, is a collective endeavor in which students and professors work together to understand and to conceptually and practically forge a livable future. Such an enterprise requires tapping the whole panoply of human capabilities. Contemplative practices can enliven capacities that are often underappreciated in academia and enlist them in the necessary and noble effort to create a more just, peaceful, economically viable, and ecologically sound world.

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Meditation, Improvisation, and Paradigmatic Change: Integrity of Practice as Key to Individual and Collective Transformation

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Both contemplation and improvisation were central in previous eras of their respective knowledge traditions—contemplation in the Western intellectual tradition, improvisation in the Western musical tradition—yet in more recent times have been viewed as anomalous. This essay explores parallels between the two epistemologies, arguing that integrity of practice is key to progress in accepting and integrating them in higher education formats. I draw upon my experience as long-time practitioner and educational innovator in both areas, viewing the Bachelor of Fine Arts in Jazz and Contemplative Studies curriculum at the University of Michigan, the first curriculum of its kind at a mainstream academic institution, as a prominent site where systematic approaches to both meditation and improvisation come together. Examining the processes as part of a synergistic framework highlights the potential for optimal discipline, rigor, theory-practice balance, and personal creative latitude—keys to progressive contemplative inroads in the 21st century academy—to be upheld in both.

I consider the advent of contemplative studies to be among the most exciting developments in my academic career and am truly optimistic about what the future holds for the field. In this article I reflect on an aspect of this work—what I call "integrity of practice"—that I believe has not received the attention it warrants, in hopes of illuminating issues that will help this area progress. By *integrity of practice* I am talking about effectiveness and regularity of practice, integration of direct experience and theoretical grounding, and other considerations that are commonly associated with optimal contemplative development. I argue that greater attention to this area will not only promote this growth in individual students and faculty; it will also allow for new kinds of advocacy that will help contemplative studies assume a more central place in our educational systems. This will in turn fuel the broader transformation of creativity and consciousness in society at large that I believe needs to take place if humanity is to address the most pressing challenges of our times.

My Story

I have had the unique opportunity to advocate for the integration of two marginalized process domains—improvisation and meditation—in my academic career. My work in improvisation includes forging inroads for classical musicians to restore this previously central process to their musical tradition as well as expanding the horizons of jazz education to embrace the global, transidiomatic melding that has been important to the jazz tradition but has eluded academic jazz studies. My work in meditation includes not only integrating the process into various kinds of coursework, but also the design of what appears to be the first degree program at a mainstream institution with a significant contemplative-studies component: the Bachelor of Fine Arts in Jazz and Contemplative Studies at the University of Michigan. In that the BFACJS is where improvisation and meditation come together, developing this model has been a fertile source of insights into parallels between advocacy of the two processes that may shed important light on steps to further progress.

To begin, it is instructive to note that both forms of process marginalization represent deviations from the respective knowledge traditions in which they originate. It is common knowledge that Bach, Handel, Beethoven, Mozart, and most of the great icons in the European classical tradition were, like their contemporary counterparts in jazz, improvisers as well as composers and performers. Less well known is a parallel kind of epistemological contradiction, wherein the systems of rational, logical thought and analysis that are attributed largely to ancient Greek and Roman schools of philosophy, and which the academic world regards as close to its roots, are but part of an exploratory scope whereby thinkers utilized contemplative methodologies to transcend the realm of ordinary mental functioning and penetrate to more silent and subtle intuitive ways of knowing. Showing that "a profound difference exists between the representations which the ancients made of *philosophia* and the representation which is usually made of philosophy today," Pierre Hadot (2002) illuminates the dietary, discursive, meditative, and contemplative practices among the ancients that were "intended to effect a modification and transformation in the subject who practiced them" (p. 2). Thus, while there is "no denying the extraordinary ability of the ancient philosophers to develop theoretical reflection on the most subtle problems of the theory of knowledge, logic, or physics" (Hadot, 2002, p. 6), which may be categorized as third-person knowing, it is also important to recognize that this was complemented—and arguably underpinned—by interior, first-person engagement. Were the prior centrality of improvisation and meditation to be placed front and center in educational discourse, I believe much greater receptivity would be found.

It is also interesting to note, then, that improvisation reentered the academy in recent decades through the modernist, tradition-specific framework of jazz that is consistent with the tradition-specific framework of European classical mu-

sic that has long served as a backdrop in the field. Meditation, on the other hand, began its reentry even more recently through a postmodern, transtraditional orientation corresponding to that which prevails in overall liberal arts culture. And inasmuch as both process streams entail their own kinds of rigor and systematization that are important to development over time, this sheds light on their respective imbalances. Jazz improvisation pedagogy has privileged the tradition-specific over the transtraditional exploratory thrust that was of equal prominence in the evolution of the lineage (Collier, 1994, 1996; Metheny, 2001), while meditation pedagogy has subordinated tradition-specific grounding with a more flexible approach that in part enables adaptability to individual faculty and student needs and interests. The point is not that one orientation is preferable to the other but that both are important and that integrity of practice will be optimal when a better balance is achieved. I propose what I call "systematic" approaches to improvisation and meditation study as key to this balance and integrity (Sarath, 2013).

Systematic Approaches to Improvisation and Meditation

By *systematic* I mean situating the respective processes within a matrix of other related processes as well as connecting them with theoretical, historical, and philosophical inquiry. Systematic improvisation includes multiple approaches to improvisation (e.g., style-specific, as in jazz, Hindustani, or Baroque styles; or stylistically open, or free, where no style parameters are set forth in advance), composition, performance, and various kinds of theoretical inquiry (harmonic analysis, historical, aesthetic, cognitive studies, and personal reflection). Lingering notions of improvisation as an undisciplined, whimsical, "anything-goes" kind of activity are thus dispelled and replaced by a rigorous framework of study and practice that—while certainly including robust, exploratory play—encompasses a wide spectrum of study. Inherent in this spectrum is the interplay between the emulative and exploratory process functions that pertains to the two poles (tradition-specific and transtraditional) noted above: emulative activity reinforces normative knowledge and promotes skill development within a field; exploratory activity extends the boundaries of a field. While creativity is often seen in terms of a largely exploratory thrust, both are essential. "It is difficult to see how a person can be creative," states Mihalyi Csikszentmihalyi (1996), "without being both traditional and conservative, and rebellious and iconoclastic" (p.71).

Systematic meditation includes a range of contemplative methodologies—which might include silent sitting meditation and contemplative approaches to reading, writing, movement, and nature communion—as well as theoretical, historical, and philosophical inquiry. Inherent in the systematic spectrum are what I have termed *formal* and *nonformal* approaches (Sarath, 2003, 2006, 2010, 2013). Key to formal engagement is tradition-specific grounding and access to the wide array of resources—systematic instruction, advanced programs, retreats, com-

munities of practitioners, theoretical/cultural backdrop—these traditions offer. Nonformal engagement entails rendering a wide array of activities of everyday life as vehicles for contemplative experience and growth. While every individual will arrive at the portion of the formal-nonformal continuum that suits their needs, I suggest that many will benefit from silent sitting meditation as a kind of anchor that supports the full range of psycho-somatic-emotional engagement.

Common to both systematic improvisation and contemplative approaches are a number of criteria that are key to the integrity of practice and may enable more compelling arguments for their advocacy. One is a link between theory and practice. Just as jazz musicians combine rigorous analytical and technical grounding with robust improvisatory creativity, contemplative development can also be enhanced through similar integration of analysis and direct experience. And just as the jazz tradition places a high premium on grounding in the rich cultural foundations in which the music evolved, contemplative traditions also have rich cultural roots, exposure to which can render practice more meaningful. Another aspect of the theoretical spectrum involves scientific research on the neurocognitive dimensions of practice (Andresen, 2000; Travis, Arenander, & DuBois, 2004; Davidson, 2004). Although this kind of research in improvisation is in a far more embryonic stage than its counterpart in meditation, with even qualitative improvisation research arguably still in its infancy, familiarity with this will eventually be as important a part of the theoretical spectrum as it is in meditation. As I have pointed out elsewhere, not only does this grounding enhance practice by placing it within a broader spectrum of considerations, it makes possible integral threads that may be woven from practice to wide-ranging intellectual areas (Sarath, 2003, 2006, 2010, 2013). Direct access to profound noetic states, in other words, enlivens deep receptivity to theoretical connections inextricably linked to the experience, thus enabling entirely new levels of third-person, intellectual threads to be sewn to first-person, contemplative experience. Inasmuch as the theoretical continuum associated with contemplative education spans both unconventional (facets of transcendent experience and development) and conventional (cognitive, cultural, historical, and philosophical) terrain, this expanded range of integration not only enhances student achievement but enables more compelling kinds of advocacy.

In addition to the above benefits, students also gain from systematic approaches a foundation that helps them navigate the ups and downs that are commonly part of creative and contemplative development over time (Goldberg, 2010; Lesser, 1999; Forman, 2004). Musicians and meditators alike often go through gray or hazy periods where it seems like little or nothing is happening, and even times of turbulence and frustration, only to ultimately break through to new levels. Grounding in systematic practice can help keep practitioners on track and aware of the possibility that, even if exterior signs are elusive, significant strides

are being made internally which may manifest externally at any moment, instead of concluding that the time has come to discontinue practice or seek a new one. Furthermore, the array of distractions to sustained, disciplined practice in any field is great in today's world. Where music and spirituality may be unique is in their respective smorgasbords of tantalizing possibilities—in other words, the overwhelming morass of musical and spiritual streams—that constantly invite new lines of exploration, possibly at the expense of sustained grounding. In my view, the cultivation of capacities to navigate meaningful and critically robust pathways through the glut of possibilities—with those of spiritual life perhaps most challenging—is among the most pressing educational aims of our times. While genuine integration of diverse influences within reasonable balance is arguably part of a healthy growth trajectory, systematic grounding may help keep this from succumbing to superficial skimming. Just as the evolution of a personal musical voice and direction of sufficient depth enables organic melding of diverse influences as opposed to surface conglomeration, the establishment of a firm contemplative foundation may similarly enable diverse exposure to be genuinely assimilated rather than crudely piecemealed.

Systematic grounding is also essential to higher-stage development in the contemplative realm, in that it provides a theoretical framework that dispels confusion surrounding preliminary glimpses of such stages. Expanded perceptual phenomena, transformations in perception of self, and other facets characteristic of this development call for the wisdom of others who have walked these pathways. Daniel Brown's taxonomy of cross-cultural parallels between these stages in diverse contemplative traditions (Wilber, 2000) underscores this point, illuminating the universality of this growth to human nature.

Ken Wilber (2006), one of the foremost exponents of contemplative practice and development, expands the range of resources that may be helpful for this growth in his emphasis on the importance of dealing with the *shadow*—the repository of repressed anxieties and emotions in the psyche—for fullest development. While he reminds us that meditation in itself is often not sufficient to neutralize these facets, it can be a powerful tool that helps one recognize them. Closely related is the issue of enhanced critical inquiry capacities. Liberation from ordinary attachments, in other words, provides an expanded vantage point from which individuals may fathom lingering shadow patterns and begin to address them. As awareness expands and qualities such as oneness and compassion evolve, new ways of understanding and addressing not only individual problems but societal and global ones begin to unfold. Surface manifestations are seen as the result of underlying tendencies that previously may have eluded awareness.

In my estimation, however, the very critical faculties whose cultivation is associated with individual contemplative development have arguably not manifested in

the collective contemplative studies movement, particularly as it pertains to integrity of practice, to nearly the extent that is possible. I believe a stronger commitment to such inquiry would reveal a number of limiting patterns, the rectification of which could open up entirely new vistas in the field, and, by extension, overall education and society at large. I offer the following observations, therefore, with the intention not to denigrate the important gains made in the field of contemplative education to date but simply to urge that the all-important attention that is being devoted to outreach—advocacy of contemplative practice and studies in the overall academy—be complemented by equally energized "inreach" activity where the field takes time to pause and reflect on patterns that are limiting to progress and which may be self-induced.

Areas of Contemplative Education Warranting Critical Attention

First is the severing within and between practice and theory, with limiting ramifications for both. By *theory* I refer to a range of considerations that includes the mechanics of practice, models of mind or consciousness and developmental stages, historical and cultural connections, and philosophical foundations of practice. Ideally, the theoretical spectrum integrates this range in a coherent scheme where the different components inform each other, which in turn directly impacts practice. When I suggest a split has occurred within and between theory and practice, therefore, I do not dismiss existing contemplative education coursework that includes rich and rigorous theoretical aspects, but rather suggest that the range of integration within this work often falls short of what is possible. That conversation around this point in literature and conferences is limited underscores my contention that self-critical attention has been subordinate in the field.

Let me begin with what might be called the "mechanics of practice," an area inextricably linked to integrity of practice. While the most commonly practiced form of meditation in contemplative education circles appears to be mindfulness, with respectful mention made of other forms, very little discourse occurs in which contrasting kinds of practices are viewed in terms of their commonalities and differences. I would think that this kind of consideration might be invaluable not only for the heightened awareness it could spawn of the range of practices available, but for the newfound insights into—and, possibly, appreciation of—their own practices, including those sustained for many years, individuals might gain from this cross-traditional investigation.

This might also dispel confusion that ultimately detracts from effectiveness of practice. As an example: I have noticed through the years a tendency for mantra meditation to be described as a "concentration" technique in contemplative education circles in order to distinguish it from mindfulness. An article by Shapiro, Brown, and Astin in the November 2011 *Teachers College Record* is among the notable examples. Having received formal instruction in two mantra-based prac-

tices, one of which I have sustained for over 40 years, I believe I can speak with some authority in declaring this characterization erroneous. Whereas the term *concentration* suggests that one aims to focus on the mantra and repeat it clearly and in intact form throughout the meditation, correct mantra practice is based not in concentration of any kind but rather in an effortless letting-go into the process. One is instructed not to focus on the mantra but simply to allow one's awareness to be easily with it. This will often mean that the mantra changes form, sometimes radically, or even disappears completely. A profoundly deep and clear meditation may be had with but one or not even a single iteration of the mantra. In episodes of pure consciousness, mantra and thought alike are transcended in an experience of contentless, radiant wakefulness—or awareness of nothing but awareness itself (Alexander, 1990; Forman, 1990). In my personal practice, a period of mantra meditation that establishes this backdrop of pure consciousness is followed by a process called *sanyama*, which is based in Patanjali's yoga sutras as taught by Maharishi Mahesh Yogi and involves a kind of penetration to the faintest, most delicate fabric of the silent transcendental field. I think of this as "meditation within meditation," where, after basking in a pristine emptiness that is also a radiant fullness, one fathoms a kind of subtle, primordial dynamism within the silence. This dynamism within silence, moreover, is key to the transformational power of collective practice I will mention below; when groups of meditators penetrate to this core, an intersubjective field effect is enlivened that may generate a harmonizing influence in the environment. While a far more in-depth discussion of the elaborate mechanics of both individual and collective practice in this framework is of course possible, most important at the moment is the principle of effortlessness that allows practitioners to dive deep within their own consciousness.

Therefore, while potential discrepancies surrounding the notion of concentration may at first glance seem trivial, I believe collective discourse on the mechanics of practice might reveal it to be pivotal to the contemplative education enterprise. Even slight excess in effort elicited through notions such as concentration and focus may introduce enough mental activity to confine awareness to surface dimensions of consciousness and undermine effectiveness of practice. Imagine taking Amtrak east from Chicago: a relatively infinitesimal switch involving a few feet of track might determine whether the train goes to Miami or Montreal. Theoretical correlates, exemplifying the importance of linking this realm to practice, also come into play, in that the reason for effortlessness instead of concentration as procedural guide is that the true nature of the relativistic self, or the conscious mind, is the transcendent Self that is its source. All that is needed for the connection with the source to be realized is a letting-go into wholeness, not the imposing of additional mental activity—which is the result of concentration—in order to force the expansion of a structure that is inherently narrow into some new form. The effortless dissolution of the relativistic self reveals its true essence

as the radiant and expansive ocean of Self—upon the experience of which one realizes that this exquisite wholeness is the primordial ground from which day-to-day experience, and corresponding educational systems, have deviated. Indeed, the meaning of the notion of effortlessness—and even contemplation, when pure consciousness is the basis—may change when conceived from this deep state.

Might practitioners of mindfulness and other forms of meditation benefit as much from this dialogue as mantra meditators, in that the issue of effortlessness is important in their practice as well? I believe that in many cases this may be so, supporting my contention that systematic engagement unites practice and theory in general, and the various theoretical areas in particular, into a synergistic and coherent framework that promotes optimal effectiveness and growth.

Another aspect of the theoretical continuum that I believe has been compromised has to do with the mystical or spiritual dimensions of contemplative traditions. Two reasons for this general aversion might be cited. One is the secular nature of the conventional academy, with many contemplative pedagogues wrestling with challenges to even bringing meditation into the classroom in the first place, let alone mystical discourse that might be even more problematic for their less enthusiastic colleagues. A second reason, however, and one that also warrants critical consideration, is the prevailing secularization in Western conceptions of Buddhism that in my view has clearly prevailed in contemplative education. Indeed, this may be one reason why Buddhist practices and ideas seem to be inordinately represented in the contemplative studies field. But why Buddhist secularization as opposed to that of some other lineage?

A primary reason may be a misunderstanding of the doctrine of *annata*, or *anatman*, which translates roughly as "no self" and is often misconstrued as "no soul," meaning that, in contrast to almost all other wisdom traditions, there is no transcendent dimension of consciousness. *Anatta* properly understood, however, refers to the illusory and ever-changing nature of the personal self, not the absence of an eternal, transcendent Self. Therefore, when Owen Flanagan (2002) argues that Buddhism is unique among the world's wisdom traditions in the coherence between its view of the human being "and the way science says we ought to see our selves and our place in the world" (p. 208), he operates from highly questionable assumptions about both Buddhism and science. Asserting that "there are no souls, or non-physical minds" or dimensions of consciousness that would transmigrate in the reincarnation process, or "divine beings," or any of the other "supernatural concepts that have no philosophical warrant," (pp. vii-viii) he dismisses important Buddhist tenets, all of which call for a more expansive conception of *annata*. This thinking also appears oblivious to the important wave of empirical research in consciousness studies that strongly suggests the emergence of a new science that is not constrained by materialist/reductionist boundaries. The Division

of Perceptual Studies at the University of Virginia Medical School, for example, has conducted research that strongly suggests the survival of consciousness after bodily death, with numerous and compelling cases in support of reincarnation (Kelly et al., 2007). University of Arizona psychologist Gary Schwartz (2011) has done work that strongly supports the existence of discarnate energy intelligences with whom human consciousness can communicate, which is remarkably consistent with Buddhist and other worldviews. The Society for Scientific Exploration, Institute of the Noetic Sciences, and Scientific and Medical Network are among the professional organizations that have been formed to provide safe havens for scientists interested in this work, the literature on which is by now extensive.

Unfortunately, to cite another shortcoming, contemplative studies and consciousness studies have remained distanced from one another, which is consistent with the split between theory and practice in contemplative education noted above. Both emergent disciplines could gain considerably from a merging. Whereas contemplative studies, even with compromised integrity of practice, may be reasonably characterized as practice-oriented with theoretical investigation subordinate, consciousness studies may be conversely described as research-oriented with practice subordinate. In attempts to bridge this gulf, Joseph Subbiondo, President of the California Institute of Integral Studies, and I have formed what is tentatively called the Consortium for Consciousness Studies in Higher Education (CCSHE). The contemplative/consciousness studies alliance may offer considerable benefits to contemplative education, because consciousness, particularly when understood from an integral perspective, provides a new means for talking about spiritual and mystical terrain that at once invites engagement among diverse spiritual pathways as well as new kinds of conversations with science. I believe the union between spirituality and science is key to humanity confronting the challenges of our times and taking its next evolutionary strides and that this must take place in our educational systems if it is to manifest in society. The merging of contemplative and consciousness studies could significantly contribute to this transformation.

In closing I would like to cite a core principle—nonduality—as a kind of organizing catalyst.

Closing Thoughts: Nonduality, Nonlocality, Sustainability, and Change

Few would deny that unprecedented change is needed in our educational and societal systems if there is to be much optimism about the future. The question, however, is what kind and degree of change are needed, and, for contemplative educators, what role the field might play in this change. I would like to propose that looking at this as a continuum that extends from horizontal to vertical change will help answer these questions. Horizontal change, the most limited kind of

reform, entails the embellishment of conventional learning models with contemplative practices, which, while bringing an array of enhancements, falls short of what is needed. In other words, as long as the current foundation remains intact, conventional tendencies to approach knowledge and human development as largely an objective, exterior affair will remain in place.

Change of a somewhat more vertical nature will entail the emergence of programs and curricular models in contemplative studies that provide students with more substantive grounding in this important educational modality. Now, small pockets embody a more complete kind of growth. The abovementioned BFA in Jazz and Contemplative Studies may be exemplary of this in uniting the first-second-third person spectrum atop its improvisation-meditation foundations.

Fully vertical transformation, however, which in my view is where educational reform needs to set its sights, entails not only the wholesale transformation of all of education, but a delving deep into the conceptual and praxial roots of contemplative traditions, which, when combined with the best of conventional learning, will provide an adequate foundation for a new educational and societal paradigm. That at the basis of most of these traditions is some conception of nonduality—the inextricable link between consciousness and the cosmic wholeness—underscores the magnitude of the shift I am talking about, for now the biggest questions about the nature and purpose of the cosmos and human existence and the mystical ramifications inherent in this inquiry come to the fore. At the same time, this could give rise to an extraordinarily rich and exciting vision of education, from which not only new classroom methodologies are spawned but new approaches to the daunting challenges of our world might extend.

Among the most exciting examples of this, in my mind, is the idea that collective meditation may radiate harmonizing influences in the environment. The basic idea is that consciousness is not only an individual phenomenon but intersubjective in nature, and that—taken in its fullest ramifications—this intersubjective field is a facet of the nondual cosmic source. When individuals penetrate to the deepest dimensions of individual consciousness they enliven the collective and its transformative properties. Empirical studies suggest that accident rates, violence, and illness may be decreased significantly through large group practice (Sharma and Clark; 1998; Orme-Johnson *et. al.* 1988). Oates (2002) has even proposed this as an antidote to terrorism.

Integrity of practice is central to the further exploration and development of this possibility, for at least two reasons. First, if it is to be successfully implemented, participants must engage in effective practice whereby the self dissolves into the oceanic Self at its, and everyone's, source. Second, a conceptual backdrop that is receptive to premises such as nonduality and nonlocality must be established if the fullest ramifications of the ideas are to be explored. Contemplative traditions provide rich accounts of these precepts, and the emergent spectrum of research

into consciousness has begun to yield empirical findings that, at the very least, are highly compatible with the nonduality thesis. Any discussion of sustainability, which in my experience has been conspicuously scarce in contemplative education circles, without corresponding inquiry into the nondual relationship between human consciousness and the cosmic wholeness, will be limited. In placing these precepts front and center and allowing them to inform the day-to-day practice that is the locus of this exciting movement, the field of contemplative studies has the potential to play a leadership role in an unprecedented educational and societal transformation that is urgently needed in our world.

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Words and Sense: Contemplative Pedagogies in Academic Writing

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How do contemplative pedagogies inform learning skills such as academic writing? This article draws on the Tibetan Buddhist distinction between the literal meaning of words (drangdon) and the inner sense of those words (ngedon), from an account from the sacred biography of the Indian saint Naropa (956-1041), abbot of Nalanda University. This founding Naropa University professor has adapted these criteria from traditional Tibetan education for the contemporary secular classroom. Writing pedagogies that integrate third-person inquiry drawn from conventional academic research and first-person inquiry, the result of inner research, brings academic writing alive. The author outlines writing strategies that integrate these two methods of inquiry, including progressive assignments that distinguish among personal narrative, opinion, and insight in the development of first-person inquiry. Finally, the article addresses specific challenges in teaching contemplative academic writing, including evaluations and grading, cultivating critical perspectives, and supporting rigor with academic, contemplative methods in the university classroom.

Now that it has been acknowledged that contemplative pedagogies provide innovative and important methods of learning across disciplines of the university (Astin, Astin, & Lindholm, 2011; Palmer & Zajonc, 2010; Simmer-Brown & Grace, 2011), it is time to examine how these pedagogies might inform the basic academic skills that are the bread and butter of our disciplines. There is no practice that is more in need of contemplative reflection than academic writing, whose hyper-objective stance can obscure questions of meaning and relevance for the reader. Yet the best of academic writing has the potential of changing the reader's (and writer's) perspectives, discourse, and values—her very life. A pedagogy that could strengthen the hidden power and meaning of academic writing for students could make significant contributions to university education.

As a religious studies scholar who specializes in Indo-Tibetan Buddhism, it is natural for me to turn to the classical religious traditions of contemplative writing as resources for appropriate pedagogies for the college classroom. Paul Griffiths (1999) has written eloquently on "religious reading" in classical civilizations from Buddhist India to Roman Africa, but he has commented that no such disciplines could be found for writing (pp. 34-57). This is less true in the Tibetan "culture of

the book," in which the emphasis in scholarly writing was on accurate translation, skillful editing, and close commentary on the original texts of the Indian canon (Schaeffer, 2009). While Tibetan Buddhism developed a voluminous literature in a variety of genres, including canonical translations and commentaries, doxographies, histories, biographies, ritual texts, and popular literature and poetry, the ultimate emphasis seemed to be on what Griffiths (1999) calls "storage" of ancient wisdom (pp. 34-57).

Nevertheless, the concerns of the Tibetan tradition helpfully inform the contemplative writing process. Tibetan history has exhibited a "sense of disquiet" regarding the tension between the scholastic emphasis upon permanent preservation of teachings and the esoteric guarding of oral transmissions (Schaeffer, 2009, p. 3). Even while scholasticism displayed exuberance when it came to the quality and care of the writing discipline as well as the aesthetics of printing, ink-making, and papermaking, there were cautionary episodes reminding the monks and translators to study less and meditate more (Schaeffer, 2009, pp. 1-18).

In reading and writing disciplines, the underlying concern of Tibetan scholars and translators has been the relationship between *words* and *sense* (*tsig* and *dön*). The juxtaposition between these notions provides the foundation for contemplation, a parallel with the *lectio divina* traditions of the West (Casey, 1997; Griffiths, 1999, Ch. 6). Rinchen Tashi, the eminent 16th-century translator, cautioned scholars to understand the "words and sense" of the Indic text and then "translate the word into Tibetan in a way that does not contradict the sense" (qtd. in Griffiths, 1999, p. 51). The celebrated 14th-century scholar Butön Rinchendrup, in his "Letter to Editors," instructed them to carefully understand that the word and meaning are dependent upon each other, and to begin with literal analysis of the word, from which understanding of the meaning will arise (Griffiths, 1999, p. 150). The theme of "words and sense" has proven to be helpful in guiding students in contemplative writing in contemporary Western settings as well.

Deciding Points in Contemplative Education: The Case of the Siddha Nāropa

In the opening convocation at the first summer of Naropa Institute, the founder, Chögyam Trungpa, narrated an event from the life of the great yogic adept Nāropa that has become a seminal trope in our university's practice of contemplative education. Nāropa (956-1041 C.E.) was a renowned scholar-monk at Nālanda University in Northeast India. According to Buddhist lore, at the peak of his academic career he had an unsettling vision in which a wrathful tantric goddess (*ḍākinī*) appeared to him, interrupting his studies to ask him what he was doing. When he confidently responded that he was reading the classic texts of the Nālanda curriculum, she inquired:

"Do you understand them?"

"Yes."

"Do you understand the words or the sense?"

"The words."

The old woman was delighted, rocked with laughter, and began to dance waving her cane in the air. Thinking that she might feel still happier, Nāropa added: "I also understand the sense." But then the woman began to weep and tremble and she threw her cane down.

"How is it that you were happy when I said that I understood the words, but became miserable when I added that I also understood the sense?" he asked.

"I felt happy because you, a great scholar, did not lie. You frankly admitted that you understood only the words. But I felt sad when you told a lie by stating that you understood the sense, which you do not." (Guenther, 1963/1971, pp. 24-25)

Knowing she spoke the truth, the great Nāropa left his teaching position in search of a yogic path in which he would truly know the inner meaning of what he studied. Many years later, the scholar-yogi returned to Nālanda as a professor, teaching in a contemplative manner befitting the great monastic university.

In that opening convocation, Trungpa declared that he wished to found a university in which the students and faculty were not content with merely the words (*tsig*) of what they studied but endeavored also to understand the sense, the meaning (*dön*). This account has served as the guiding principle of the numerous contemplative pedagogies at our University.

These notions can be traced back to the *Saṃdhinirmocana-sūtra*, "the teaching elucidating the Buddha's hidden, underlying intention" (Power, 1995; Lopez, 1988). This discourse is a late composition (3rd century C.E.) lauded by John Power as the hermeneutical sūtra of the Mahāyāna (Great Vehicle) that provided crucial paradigms to interpret seeming contradictions in the Buddha's teachings (Power, 2005). Among the paradigms introduced in Chapter 7 of the sūtra is the distinction between *neyārtha* (*drangdön* in Tibetan) and *nitārtha* (*ngedön*) that provides the key to understanding the questions of the wrathful ḍākini.[1] Robert Thurman (1978) developed a Buddhist hermeneutics based, in part, on this distinction.

Drangdön refers to the literal and strict but also merely provisional meaning of a teaching or text, understood through intellect and common sense. It is considered foundational to understanding, involves precise study of detail, and in tradi-

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1   For the remainder of the article, the Tibetan terminology, rather than the Sanskrit of the Indian sūtra, will be used. In Tibetan, *drang* refers to that which is straightforward and accessible but needs further clarification or explanation; *nge* refers to certainty in which there is a genuine, profound understanding; and *dön* is essence or meaning.

tional settings entails memorization and mastery of the structure and logic of the text or teaching. *Ngedön* refers to the profound, deeper meaning of a teaching or text, building on the literal meaning but requiring insight that draws on personal experience, realization, and certainty. As the *Akṣayamatinirdeśa-sūtra* (Exposition by the Great Being Inexhaustible Intention) states:

> Sūtras that teach the establishment of the conventional are called [sūtras] whose meaning requires interpretation. Those sūtras that teach the establishment of the ultimate are called [sūtras] of definitive meaning. Sūtras which teach with various words and letters are called [sūtras] whose meaning requires interpretation. Those sūtras that teach the profound—difficult to see and difficult to understand—are called [sūtras] of definitive meaning. (Lopez, p. 61)

In other words, the literal meaning of the text is considered provisional, while the deeper, more profound understanding of what the text is pointing toward is considered definitive.

Within the Buddhist tradition, this hermeneutic has been used in a variety of ways, some of them sectarian and pejorative. Tibetan lineages have differed over which sūtras or commentaries represent the provisional or the definitive, sometimes with bitterness and stridency that led to warfare (Samuel, 1993). This particular way of classifying texts predominated in 17th- to 19th-century Tibet until the blossoming of the *Ri-me* (non-sectarian) movement of Jamgön Kongtrül Lodro Thaye and others, which endeavored to counteract sectarianism with new interpretations of "provisional" and "definitive" (Smith, 2001).

Trungpa (1982) taught these two in a characteristic Ri-me manner, saying that the classification of texts or philosophic schools was not the initial intention of these categories and was merely a sectarian way of speaking. Instead, he encouraged his students to think of the provisional and definitive aspects of every Buddhist teaching, from the most foundational to the subtlest tantric texts: "all levels of teaching have literal and profound meanings." He also spoke of the definitive as "a style of teaching," saying "how we approach it makes it definitive." How we receive teachings can make them definitive as well. For example, listening too literally makes teachings provisional; taking things to heart and seeing for ourselves makes them definitive. "The basic meaning of study is that you are not fooling yourself. There is no need to pretend to understand. At the same time, there is joy in study."

There is no need to denigrate the precision of the provisional, however. Detailed study is foundational, a prerequisite for understanding the meaning. If the student tries to leap into the definitive without preparing the ground, there can be no profundity. Trungpa (1982) spoke of the provisional as the "finger pointing at the moon," as in the Zen teaching; the finger is absolutely necessary, but it cannot

be mistaken for the moon. It is only by looking where the finger points that one can realize the true, inner meaning of what is indicated. "Reality comes through if you're open to it," he concluded.

Trungpa understood that a university setting was inappropriate for a merely Buddhist understanding of these principles, and he encouraged the faculty to be inspired by traditional Buddhist presentations of this hermeneutic and apply them in a nonsectarian educational setting. He encouraged an approach to contemplative learning that helped students trust their own inner wisdom, their direct experience—for that is the definitive, constantly opening to new horizons of understanding.

Words and Sense:"Third-Person" and "First-Person Critical" Inquiries

The paradigm of Buddhist hermeneutics based on *drangdön*, or words, and *ngedön*, or sense, has served as an excellent basis for teaching contemplative writing in my graduate and undergraduate religious studies courses, many of which are concerned with the study of Buddhist texts in translation. The crucial point is how notions of the definitive or profound meaning are interpreted in secular, contemplative-based education. That is, how do we faculty members support students in finding their own unique perspectives on the profound implications of what they study? How can we also help them engage in a personal journey that continues throughout their lives, beyond their formal education? While this is an important concern for religious studies, it has application in many other humanities disciplines. This kind of learning is built on interactions between the "third-person" inquiry that is already foundational in university education and "first-person" inquiry that has the capacity of drawing from inner wisdom.

Contemplative teaching requires that we faculty appreciate the inner wisdom that our students already have: the curiosity, clarity, and inquisitiveness that are more fundamental than their attitudes or habits. If we faculty members do not begin here, our teaching becomes a futile endeavor that uploads information in an atmosphere of contempt for our students. In order to tap into this appreciation, we must have that kind of appreciation of our own inner wisdom that precedes the mastery of our academic disciplines. Why should we bother to teach if we have lost sight of this capacity in ourselves and our students?

Contemplative teaching in a textual seminar draws students into a dialogue between their inner wisdom and the objective learning necessary for reading texts. This brings the classroom alive. As a foundation, we use "third-person" methods of academic investigation, developing a thorough grounding in the literal and informed understanding of the sources we study. For example, knowing that a text was authored in the second century CE by a master who took the name Nāgārjuna and comprehending the prevalent concerns of Indian philosophy in that milieu are im-

portant foundations in the study of the *Mūla-madhyamaka-kārikās*, "the root verses that establish the middle way." Mastering the technical vocabulary of the Sanskrit verses adds to appreciation of the sophistication of the meter and brings students into the profound detail of the reasonings. We then study the structure of the logics and refutations, the positions of the opposing view, and the conventions of the arguments. All of this relies on third-person inquiry, the *drangdön*.

In class discussions and writing assignments I bring in personal reflection in a particular way. Without careful understanding of what is involved, the classroom can become excessively subjective. First-person inquiry is always tricky. Hal Roth (2008) uses the phrase "critical first-person inquiry," emphasizing that students should engage in mindfulness techniques "without prior commitment to their efficacy." In Brown University's contemplative studies program, students are asked to "appraise their experiences in order to gain a deeper appreciation of their meaning and significance" (Roth, 2008). These distinctions are very helpful, and they identify how first-person inquiry can become a powerful source of learning.

To lay the ground in my classes, I speak of three distinctive realms of investigation: 1) intellectual inquiry, based on concepts or ideas; 2) emotional response, governed by reactions and feelings; and 3) observations, based on sense perceptions and their immediate interpretation.[2] According to the Buddhist psychological traditions (*Abhidharma*), all three types of knowing have strengths and limitations. However, when supported by mindfulness training, sensory experience has the greatest capacity to access most directly the inherent wisdom of the practitioner, and so this training is pivotal in my classrooms. The Dzogchen and Shambhala lineages of Naropa's founder suggest that first-person critical inquiry develops directly from mindfulness of sense perceptions. For Trungpa, distinguishing between these three areas of knowing was the foundation for contemplative education, and sensory awareness and perception were the critical elements.

Normally, students consider first-person inquiry to be limited by whether they like something or not, but it is important to distinguish opinion from first-person inquiry. If asked to elaborate, students immediately formulate a narrative or storyline that is filled with scripts about who they are and what they experience. In a contemplative setting they first learn to discriminate between these varieties of discourse, for both the intellectual and emotional are usually embedded in complex narratives from the past that have little to do with their present experience. These narratives often eclipse their inner wisdom, or, at the very least, complicate it.

Mindfulness training introduces students to their present-moment experience based especially on sense perceptions. As students are able to observe through these clearer lenses, they begin to develop a kind of fresh first-person inquiry

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2   These distinctions are based on the Buddhist *Abhidharma*, especially as filtered through the Tibetan commentarial traditions.

that does not merely resurrect narratives from the past. Once they begin with observation through the senses, they gain access to fresh insights and perspectives related to their more complex emotional and conceptual responses to their experience. They understand the difference between an idea copied from a source and their own personal insights. This is how I speak of "critical first-person inquiry." Integrating third-person and first-person inquiries in this manner brings the inner wisdom of the student into direct dialogue with the wisdom of the ages derived from texts and studies from whatever tradition one studies.

Contemplative Writing Strategies: Naropa University Classroom Experiments

For decades I have experimented with contemplative writing pedagogies for my students. My undergraduates swing between extremes, writing either reflection papers that say whether or not they "like" something or cardboard research papers that assume everything they read on the Internet or in books is true just because it was written and published or posted. My graduate students have been trained in the objective voice in their undergraduate studies such that they do not trust their own intelligence, insight, or personal experience. This kind of third-person writing generally produces papers that trust only the findings of students' mentors and advance points whenever they can cite three or more sources, even if their commonsense tells them they are ridiculous. This produces research papers that may be considered excellent in some academic settings, but which disguise the inner journeys of my students. They also lack creativity, whether inventive or intellectual. I wonder if there is any learning happening at all, and I find them deadly dull to read. Even my best students have developed a firewall between their academic skills—many of them excellent—and their inner lives, which often appear disheartened, tentative, and immature in comparison. For years, I have strategized how to bring first-person inquiry into academic writing in a way that strengthens both the first- and third-person expressions of my students. When assignments succeed in this, I have witnessed a dynamic process of learning.

Presented here are samples of the various strategies I have devised; they would be useful in any humanistic discipline.

Experiment One: Contemplative Writing Assignments in Class

This method works especially well in my undergraduate courses as a way to inaugurate the process of contemplative writing. I hand out a short paragraph of evocative text, printed at the top of the page, folded in half, and stapled. Students sit quietly, practicing mindfulness or presence in whatever way they have been trained, letting go of expectations and thoughts, resting in the present moment. On a signal (I use a small gong), I ask them to open the paper and we read the

quote aloud together, slowly, just resting our attention on the words, resisting the temptation to rush into speculation on the meaning. Then they read the quote silently over and over again, appreciating the words in this way.

Roughly five minutes later, I signal the students to turn to a partner near them and quietly begin to verbally explore the meaning together, each of them taking a little time to share what has come up. This conversation can go on for five to seven minutes. Then it is time to sit silently, mindfully, with the text, gently considering their initial investigation of the words and their exchanges with their partners, and allowing their fresh sense of the meaning in that moment to dawn. Finally, I signal that they are to write for seven minutes, bringing the words of the text into conversation with the meanings they are discovering in that moment. In different settings they may format their writing in a variety of ways: poetry, essay, or free-writes. Then they may share what they have written with their partners and give me their papers for non-graded feedback.

Experiment Two: Personal Questions as the Foundation of Discernment in Choosing a Paper Topic

When meeting individually with students regarding possible topics for term papers, I suggest they begin with something that captures their personal interest or addresses an abiding intimate question in their lives. When it is difficult for my students to begin this way, we explore a process of personal inquiry. I encourage them to develop a journal of questions and then discern what question lies behind that question, on and on, until they can find a core question in their experience. It is important that this journal remain private, though if students wish to show me their work, I assist them as best I can. Can their core question be alive for them in some way? Is there a way to explore that question within the context of the subject matter of the course? Oftentimes the question becomes far more than the personal, individual concern of the student and ties to central questions of human value and meaning. For example, when a student was distressed about a bad break-up, the question journal traced a line of inquiry that led to the veracity of finding life's purpose solely in a love relationship, and the paper focused on the distinctive romantic love tradition in Western culture.

On many other occasions, students come to me asking for extensions on paper deadlines. Let me share one example. When I question the student, he comes up with vague excuses. After further conversation, he confesses he is an habitual procrastinator. I ask him what this is, how he experiences it, and so forth—and then suggest that he write a mindfulness paper about procrastination, utilizing sources from the subject of the class. What is procrastination? How is it described in contemporary psychology? How does he experience it? What are its moments,

its parts, in mindful detail? How does it feel physically, emotionally, mentally? In other words, could the student use an obstacle of his life as the beginning point for a paper? He has roommate issues; she has drug or alcohol addictions; he has a chronic illness; she has experienced the death of a loved one. I encourage each of them to use whatever began as the "excuse" as the starting point for the investigation, for nothing is more important than placing attention on the core issues that we normally think of as distractions. The papers produced by such investigations are nothing short of remarkable.

Experiment Three: Finding the First-Person Critical Voice

It is one thing to glimpse the clarity and inner wisdom at the heart of experience, and quite another to discover how to express this experience in words. Throughout the world's religions, glimpses like these are deemed ineffable and inexpressible, yet contemplative pedagogy must retain the responsibility in higher education to help students find appropriate expressions. How can they voice the first-person critical inquiry? How does this differ from complete subjectivity, superficial reaction and opinion, or a constant self-referential narrative?

For several of my classes, my students apply mindfulness methods adapted from early Buddhism to bring an objective eye to the most personal emotional experiences.[3] Students choose a familiar emotion, such as anger, that recurs in their lives. They read Buddhist psychological (*Abhidharma*) texts and commentaries from the Indian and Tibetan traditions that are taxonomies of mental states, describing the experience of anger in vivid detail without storyline, including energetic descriptions and the effects of anger on actions and on relationships with others (Asanga, 2001; Rabten, 1975; Mipham, 1997).

For a homework assignment, I ask students to document their own experiences of that emotion, drawing from sensory, emotional, and discursive elements. Like the *Abhidharma* commentaries, the students are to take a value-neutral, objective voice. How does anger feel in the mind? In the body? In the environment in which it is experienced? Can anger be described without reference to the "reasons" for the anger (its setting, triggers, and results, circumstantially-speaking)? Can the student write about this and still feel how the anger feels? This cultivates a dynamic critical first-person inquiry.

At first, students struggle to fulfill this assignment, but with practice they discover the vitality and wisdom of their emotions; anger is not a monolithic state, but has many shades and permutations that constantly change. They also discover that their narratives about anger fossilize them into caricatures of how they ac-

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3   For a complete description of student responses to this pedagogy, see Simmer-Brown (2011), pp. 229-236.

tually feel. They report that intense emotion, when unexamined and not directly experienced, drives them to cause harm to themselves and others. They also discover that there is wisdom within the emotion, and when they learn to listen to intense emotions within the context of mindfulness, that wisdom is available to enrich their everyday lives. They discover a fresh, critical first-person perspective that feels clear and true, and they begin to trust themselves and their own inner wisdom.

Experiment Four: The First-Person Voice in Academic Writing

The next stage for students is learning to include the first-person voice in their academic writing, a "slippery slope" for a university setting. But when students are encouraged to do this, they begin to weigh what they actually know (as opposed to what they are drawing from third-person sources) and to express carefully their own insights and discoveries. They begin to "own" their academic writing in a different way than previously, and this brings greater excitement and rigor to their work. I especially encourage the first-person voice in the first semester or two, so that by the time students are writing their theses or senior papers in the last seminar they take with me, the first-person pronouns are no longer necessary. In fact, I discourage the first-person voices in this final stage; by then, they have inhabited their work, and they express confidence in their own independent reflection on what they are writing.

The journal as a source. When students are writing about a matter that lies close to their personal questions, they often are at a loss about how to integrate their personal experience into the paper without disrupting the third-person inquiry. This is when I suggest that they create a discipline of first-person observation journaling while researching and writing the paper. For example, a gifted student was biracial and wished to investigate issues of identity and race in her academic writing. In her personal journals, she inquired into her own sense of racial identity while reading Nell Painter's *The History of White People,* which demonstrates the cultural construction of "whiteness" in Western society (Painter, 2010). Her journals reflected her own inquiry that paralleled the research, drawing from personal questions that had haunted her life. The final paper was rich and nuanced, and it brought out critical perspectives on Painter's work. When students journal in this way, they reflect freshly on these issues, including thoughts and feelings along with fresh observations coming from their personal inquiry.

Once the actual paper-writing process is underway, I suggest that students selectively (and sparingly) quote from their own journals, using them as if they were a third-person source, as a way of bringing their inner journey into the paper. It is important that this method be used only if it contributes to the effectiveness of the paper. They use the conventions from the *Chicago Manual of Style* (2010)

for unpublished works such as diaries and journals to cite their own work. With few exceptions, narratives of events in their lives have less power than their fresh insights about the core questions of the paper. These additions enliven the paper and bring to the fore perspectives and insights that might not have made it into the paper otherwise.

The preface, insert, or afterword. Another way to bring the first-person critical voice appropriately into academic writing is through the dedicated preface, inserted segment, or afterword. The body of the paper is strictly third-person, with appropriate citations, structure of argument, and flow, but the addition of the first-person voice (again, sparingly) enriches the perspective of the paper and provides depth. In these segments, my students explain their stake in the topic and why they are writing on this subject.

Integration without the first-person voice. Once students have worked with integrating their personal experience with the first-person voice, I encourage them to begin to find ways of speaking that do not use first-person pronouns too prominently. They read academic writing in which the scholar's insights are integrated quite naturally into the prose, not necessarily relying on narrative or the first-person voice. This is usually when they are at the end of their Naropa careers and preparing for graduate or PhD study or additional professional training. Most of my students quite naturally find a way to inhabit their academic writing and experiment with different ways of presenting their insights and discoveries that are in accord with the academic standards of conventional graduate institutions.

Experiment Five: Grading Rubrics that Place Personal Integration in Context

When grading student essays and term papers, I base one third of the grade on the effectiveness of the strategies described above. For new contemplative writers, I look for examples from personal experience that indicate the student's understanding of what they are analyzing. For more established writers, I evaluate their first-person paragraphs or quoted journal entries, ensuring that they enhance the student's argument or line of reasoning in an effective manner. For the more developed contemplative writer, I look for fresh insight and expression of personal discoveries in third-person writing that resonates with their experience. It is important to me to signal to the students through this kind of evaluation of their work that inner development and the personal voice are important aspects of academic writing.

Contemplative Academic Writing: Classroom Cautions

What are some of the challenges in the experiments I have outlined above? I have three concerns: the first regards the students' experience, while the second and

third relate to the contemplative professor. Sometimes students have so much eagerness to cultivate the first-person voice that they forget the entire enterprise of academic learning. It is important that students appreciate the first-person voice in writing in the full context of the academic endeavor. Third-person academic writing acknowledges the wisdom of other scholars, joins their lineage of effectively making the case for their perspectives, and speaks to a specific discourse community. We are asking students to "occupy" their writing so that they have genuine contributions for the full-blown academic field to which they are contributing. This requires a balanced appreciation of their own discoveries (first-person) placed in an environment of interactive classroom learning and listening (second-person), both of which are brought into dialogue with the respected academic disciplines they are studying (third-person). Appreciation for this full context enhances student learning.

As a second concern, I often wonder whether the strategies I have devised would work for another professor in another academic context. It is clear to me that contemplative teaching is more than a set of exercises or assignments that can easily be adopted based on reading a single essay from a contemplative professor. My own experiments have been based on over four decades of contemplative practice and study that have brought an intuitive connection to the approaches I have developed. The greatest advice I could provide is that the contemplative professor must draw from personal practice, training, and experience to devise classroom pedagogies that are appropriate to the material studied. These pedagogies are not developed in a month, semester, or even an academic year. They must be devised within the professor's experience, gradually introduced over time, and adjusted and changed based on measures developed by the professor or department to ensure that they deliver the promised results. They must also reflect the deepest values of the professor and the academic field.

Another pitfall that accompanies the previous ones is that working in this way with contemplative academic writing is labor-intensive, requiring close reading of student work, extensive comment both in person and in writing, and follow-up over the progression of a semester or semesters. My work has been supported by dedicated graduate assistants; their perspectives, advice, and ancillary skilled coaching of students have strengthened this project. I have also done in-services with the fellows in the Naropa Writing Center so that they could properly support my students on this contemplative journey. The primary responsibility, however, has been mine, and this has required making contemplative writing a priority in my classrooms.

The main point is that contemplative teaching is a deeply rewarding journey, but one that takes imagination, patience, consistency, and focused real time with students and their writing. It also requires that the professor have a contemplative

practice at the personal core of their professional life. Students may need to be inspired to fully engage their own educational journeys rather than coast through assignments completed without any personal meaning for them. Finally, academic colleagues may not understand how the use of the subjective first-person voice may eventually enhance the intellectual creativity and nuance of student writing. It is important that the contemplative professor have a fully-developed strategy in place in order to receive the necessary academic support of the department or school and to draw students who are ready to write from their experience.

Conclusion: Educational Blossom vs. Consumer Culture

There may be more global reasons why introducing contemplative writing practice may be important in this time. Gradually, over the last decades, academic writing has unconsciously taken on the consumerist values of mainstream Western culture, and the contemplative professor has a moral responsibility to remedy this. Paul Griffiths (1999) contrasts the ancient practices of religious reading with, modern academia in which writing emphasizes

> metaphors of production, consumption, use, and control. Academic readers consume the works of others and produce their own; they are defined and given status by the body of literature they control and upon which they are accredited to give authoritative (expert) voice for proper reward; they cite and mention (rather than religious read), and are in turn judged largely by the extent to which the works they produce (again, the industrial metaphor, the image of mass production) are cited and mentioned. (p. 42)

Griffiths goes on to remark that when our literature is commodified this way, literature is valuable only to the extent that it produces the desired effect. Then it can be discarded, "returned to the circulating library, sold back to the used bookstore, or given away" (p. 42). This shows the consumerist basis of our literary works.

Perhaps our contemplative methods of writing can contribute to the creation of environments where students discover writing as an unfolding process of inner discovery combined with exploration of the ancient and modern works of their intellectual and wisdom forebears. Through this work, it may be possible to develop in them a lifelong love of learning rather than a consumer's expediency. Anything that can contribute to the wealth of the inner life of learning and respect for literature will enrich our global human culture.

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Classroom as Dojo: Contemplative Teaching and Learning as Martial Art

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This paper identifies assumptions about education behind the mainstream North American schooling: that the primary educational goal is to teach subject matter and deliver knowledge and skills, most often divorced from the immediacy of students' lifeworld, in the service of consumerism driven industrial civilization. Moreover, student behavior defined as unproductive and disruptive in terms of reaching such instrumentalist goal is seen as in need of control and management, which then becomes central concern and operation of schooling. This paper challenges these assumptions and offers a larger educational vision and practice in alignment with world wisdom traditions, namely becoming more fully human. We describe becoming human in terms of becoming increasingly whole, integrated, attuned, and in alignment in the three-fold relationality of self-other-nature. We then propose contemplative education as a way to cultivate becoming human, and offer an example of martial art practice and an alternative paradigm of classroom-as-dojo as a guiding metaphor. Contemplative learning in the dojo aims at embodied, intersubjective, and self-authoring practices.

The Warm-Up Preamble

Everything human happens in the classroom: joy, suffering, boredom, resentment, fear, anxiety, jealousy, envy, greed, love, anger, and hatred. All of these and many more flood our consciousness, teacher and student alike, moment by moment. All these very human experiences are acted out subtly and not so subtly, spoken of or hidden, guarded or left open. We note that what does not happen sufficiently in most typical North American classrooms is learning centrally about what really goes on in the mind-body-heart-soul-spirit (henceforth referred to as "mind-body" or "body-mind") of students and teachers, and working with this inner world content in the body as the ultimate container and vehicle for expression of human consciousness. We propose that working with such em-

bodied and enacted materials in the classroom is central to an educational project of cultivating humanity. This project has deep roots in many world wisdom traditions. Today, as we struggle with the destructive impact of human beings on each other and on other beings, we need, more than ever, wisdom.

The modern North American cultural understanding seems to be that school is not the place where the abovementioned learning and transformation can and should take place. Rather, school is primarily where quantifiable knowledge and testable skills are taught and acquired. Teachers teach subjects, and students learn subject content. In this understanding and operation, the distracting and disturbing factor, apparently, is that students, despite coercive and systemic discouragement from all levels of culture, come with their subjectivity, and experience suffering, boredom, resentment, fear, and anger, as well as elation, excitement, and hilarity. Emotions, especially those deemed "negative," are most often seen as distracting our students from learning the required curriculum material. Indeed, they are often seen as disturbing influences, taking students' minds away from course content and also at times as precursors to behavior that is disturbing to others and to the "smooth" running of the classroom.

In mainstream North American teacher education programs, student teachers are taught mostly to *manage* the classroom. Two fundamental assumptions about education seem to be built into this idea of managing the classroom: (a) that to teach subject matter is the primary educational goal, and (b) that students behavior that is defined as *unproductive and disruptive* from the viewpoint of the above goal must be controlled. Through the centuries to the present moment, various methods of control have been proffered and tried. The best-known and most widely implemented are variations on discipline-and-punishment, with or without the addition of rewards. Our intent in this paper is to challenge these fundamental assumptions themselves and to offer a different educational vision and practice.

We distinguish *education* from *instruction*. *Education* is for growing, raising, maturing, cultivating, and fulfilling human beings, manifesting the full potential of humanity. We again note here that these substantive educational ideals of humanity have been addressed, for instance, in many of the world's wisdom traditions.[1] Notwithstanding the differences in their worldviews, these traditions share an understanding that education has to do with *human becoming*: becoming human beings. *Instruction* has a narrower meaning: teaching people to have certain knowledge and skills that are deemed to equip them to function and survive in a given society. Of course, it is a given that the process of educating will involve instruc-

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1   "Wisdom traditions" refers to traditions of teachings that emanated from the Axial Age thinkers, such as Parsva and Mahavira (Janism), Siddhartha Gautama (Buddhism), Jesus of Nazareth (Christianity), Lao-Tze (Daoism), Confucius (Confucianism), Socrates, and the like. Refer to works by Karl Jaspers (1962, 2003) and Karen Armstrong (2006), among others, for discussions of the Axial Age. See also a contemporary interpretation by Heesoon Bai (2014).

tion in particular knowledge and skills. However, it is important not to conflate education with instruction, lest we lose sight of the larger aim of education that the wisdom traditions hold up before us: humans increasingly maturing into and embodying a fuller humanity that can manifest wisdom and virtue.

Currently we are witnessing an experience of education that is dominated by instruction. Teaching and learning have become focused on the acquisition of subject matter, content knowledge, and skills that are aimed at equipping students for securing jobs and therefore, presumably, material and financial security in their lives. Again, we point out that material and financial security, while necessary, is not the same as, and cannot support the development of, existential security and ecological well-being—the sense of being whole and full, or fulfilled, in alignment with the world and cosmos, and in attunement with the three-fold relationality of self-other-nature (Bai, Cohen, & Scott, f2013). The result of narrowly identifying education with instruction not only blinds us to the larger aims of education but also, from the viewpoint of student experience, may render the knowledge and skills they acquire meaningless, particularly in the present sociocultural context that increasingly presents a future of uncertainty and provokes a sense of inse-curity. Boredom, resentment, anger, alienation, meaninglessness, and angst afflict many students. The increasing pressure of competition in terms of knowledge ac-quisition leads to increased suffering and decreased inner peace and contentment. What is often seen in classrooms as disturbing behavior is "acting out," which is the "outcome" of life experience that is lacking in meaning and vital engagement. Unfortunately, there seems to be little keen appetite amongst educators to see disturbing behavior by students as a message from the margins that is important for mainstream culture and for education practice itself: a message that there is a problem!

In the name of survival and success, children all over the world are compelled, under the threats of punishment and the withdrawal of love, esteem, and support, to compete in acquiring impersonal and irrelevant knowledge and skills. In collec-tivist countries such as Korea, Japan, and China, where the pressure to compete is inordinate, the student suicide rate is high (Jung, 2015; Yip, 2008), while in individ-ualist countries such as the United States and Canada, alienated and angry young people commit mass killings on school grounds ("School Shooting," n.d.) and be-come increasingly involved with substances and activities that help numb their feeling dimension and their experiences of psychological breakdown. All these are, in our judgment, the *psycho-logical* consequences of an instrumentalist edu-cation that has prioritized acquiring impersonal and meaningless knowledge and skills over developing as whole human beings. Ours is a culture that dehumanizes, turning human *beings* into human *doings*. John Taylor Gatto (1999), an author and former New York State and New York City Teacher of the Year, observes:

> There must be some reason we are called human *beings* and not human *doings*. And I think this reason is to commemorate the way we can make the best of our limited time by alternating effort with reflection, and reflection completely free of the get-something motive. Whenever I see a kid daydreaming in school, I'm careful never to shock the reverie out of existence. (p. 170)

Educational environments are a microcosm of contemporary culture: what goes on in a culture goes on in its educational environments. Thus, by transforming the heart of "human doings" education, and rediscovering and recovering the meaning of education as the development of whole human beings with courage, compassion, and wisdom, we can significantly affect the ethos and orientation of our culture, which is currently saturated with instrumentalist values and alienated psyches. Key to this work is moving beyond the primacy of content absorption and task completion. Is there a paradigm of education currently available and being tried out that we see as promising in holding this key? Yes. We see contemplative education as reorienting what we think education can and must embody: a shift from the primacy of instruction to the primacy of education of human beings toward their wholeness as ethical citizens who feel that contribution to the community and the planet is primary. Contemplative approaches to education facilitate reaching toward this objective through addressing the *being,* in contrast to the *having,* dimension of humans (Fromm, 1976). A contemplative curriculum cultivates the depth and breadth of being human through a self-cultivation process that facilitates the possibility of human beings becoming increasingly whole, integrated, attuned, and in alignment (Bai, Donald, & Scott, 2009; Bai & Scott, 2011; Palmer & Zajonc, 2010). The primary focus of contemplative inquiry and learning is on *who we are*, not *what we have* or *what we do*. This is not to say that we will neglect the dimensions of having and doing: these dimensions, especially the doing dimension, will unfold naturally as we increasingly remove inner obstacles to the unfolding expression of our core humanity, and we will seamlessly integrate having and doing with being.

With the practice of contemplative education, the following kinds of personal inquiries become central in educational environments: *how do I become increasingly whole? How do I enhance the integrity of mind-body-heart-soul-spirit? How do I continue to develop my connection with life and the universe through my breathing, seeing, sensing, feeling, thinking, self-reflecting, moving, and relating? How do I develop myself to enable my ability to be in and with the world in all of its conflict and complexity? How can I take that which confounds me as a teaching from which I can grow and learn? How can I face the world and welcome in all of life? How do develop my sense of a spiritual base within? How can I become increasingly compassionate in the face of adversity that threatens my sense of self? How do I grow love and good will in the face of competition and pressure to outdo others?* Contemplative learning is about working with these

and related questions, taking us into those practices that move us more and more in the directions of "yes" and "this is how" in response to them.

In this chapter, we introduce the concept of classroom-as-*dojo* (the Japanese word for "place of the Way") as a guiding metaphor for how we can work with the above inquiries. Embedded in this metaphor is a holistic and contemplative paradigm of practice. We offer an illustration of the classroom-as-dojo within which contemplative learning is taken up as embodied (through attending to and working with the body), intersubjective (through engaging and working with each other's subjectivity and the relational field), and self-authoring (through working with and transforming one's interiority) practices.

Stepping Into the Dojo

Dojo (道場) is a Japanese term for a place where a martial art is typically practiced. Dojo literally means "place of the Way." Initially dojos were adjunct to Buddhist temples where people meditated. H. E. Davey (2007), a contemporary martial arts teacher and Japanese culture scholar, explains: "the term [dojo] has meditative connotations and describes the training hall used in some Japanese cultural arts" (p. 35). In classical Japanese arts of all kinds (as with classical Chinese and Korean arts), the purpose of artistic practice is twofold: (1) to use the practice to facilitate learning how to be in the *do* (*dao* in Chinese); and (2) to be in the process of perfecting one's self in order to be increasingly in the flow of the universal energy in all of life's activities.

The dojo, then, is the place where, supported by a community of fellow practitioners, a person increasingly strives for and cultivates integration of mind, body, heart, soul, and spirit. For us what matters centrally in the classroom-as-dojo is not so much what is taught (subject matter) as whether we as learners and teachers are growing as human beings through whatever subject matter it is that we are learning and teaching. Morihei Ueshiba, the founder of *Aikido*, a form of martial art originated in Japan, stated: "True victory is not defeating an enemy. True victory gives love and changes the enemy's heart" (as quoted in Leonard, 2000, p.150). Here the attacker or "enemy" is any adversarial force, including and especially the internalized forces of a person's social, cultural, and familial conditioning that limits and blocks the person from growing and embodying greater potentials of humanity. This quote also suggests that making a true connection with the other is central to meeting challenges and overcoming difficulties. Such a connection is akin to an I-Thou encounter (Buber, 1970), where the sanctity of each person is honored regardless of the conditioning that obscures his or her humanity. When the martial artist is able to see the suffering heart of the opponent, he or she can respond in ways that help the other not to cause harm to themselves or others.

Educators as Martial Artists[2]

There is nothing like a story to concretely embody abstract ideas. We wish to start off this section with a story that will give a sense of what we mean by "educators as martial artists." In the course of this paper we will share more stories, both our own and others'.

There is a story from an unknown storyteller retold by Amy Mindell (1995) about an American martial arts master who was riding in a subway in Japan:

> An aikido master from the United States went to Japan to refresh his skills. He got onto one of the subways in Japan and suddenly a big brute came hobbling down the aisle, drunk and threatening to everyone. The aikido master was thrilled that he could finally put his skills into action, since he had never had the opportunity outside of his traditional practice.
>
> As the brute and the aikido master were about to fight, a small, elderly man sitting on the bench looked up and asked the drunken man if he would come over and talk. The drunk threatened the old man, but was nevertheless intrigued. The elderly man asked him what it was that he had been drinking. The drunk replied, "Sake!" The old man smiled with delight, saying that he, too, loved to drink sake outdoors with his wife in the evening. The old man asked the drunk if he had a wife, and the drunken man said that he was alone and very sad. When the aikido master from the U.S. was about to leave the subway, he turned around and saw the drunken man lying with his head on the old man's lap, talking quietly as the old man stroked his head. (p. 104)

What is evident in this story and relevant for educators is the elderly man's ability to sense the other and join him in his world. This ability can be trained through certain martial arts, such as Aikido, that have the inner development of the practitioner as their primary focus. The man who is drunk is living in an alternate reality, one that shields him, through alcohol, from the pain of his own dislocation and isolation (Alexander, 2008). The elderly man has a keen sense of what it will take to connect with this person even in the latter's alcohol-altered state. He does not shy away from the reality before him and is able to meet it. This is precisely the core attitude and ability that martial arts cultivate. The elderly man in the story protects the inebriated man and the others in the subway car while he helps the man connect with his heart. It is the elderly man in the story who is a true master of the Way.

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2   Portions of the content in the following sections were originally written in Sean Park's doctoral dissertation, http://summit.sfu.ca/item/14288.

Note that in our commentary we have referred to the inebriated person in the story as a *man who is drunk* and not, as we commonly say, a *drunk*: a small but important point for us. To use the latter term would have reduced this man to an object—an "it"—and stripped him of his core humanity. The educator as martial artist and practitioner/exponent of the Way fights against such reduction and fights for overcoming all manner of alienation and disconnect. Morihei Ueshiba (1984) stated that the primary goal of the martial artist is to achieve mind-body unity (Aikido literally means "the Way of unifying with universal energy"): not to defeat the opponent, but to join with them so that the *hearts* of all involved may be transformed. The little story above illustrates this philosophy of martial arts well.

To transform the heart we need to see how the attacker and the lover are not "out there" but within (Palmer, 1994, p. 6). "Attackers" are those people and situations that we find annoying, threatening, loathsome, and troublesome. "Lovers" are those people and situations that we are attracted to, admire, and like. As such, we are surrounded by attackers and lovers every day, everywhere, including in our classrooms. And, most importantly, lovers and attackers are within us, as our likes, dislikes, aversions, hatred, fear, greed, compulsions, and delusions. Martial arts, when undertaken as Way (*dao*)-finding and harmony-making, as in Aikido, prepare us to meet, confront, and stay in contact with the lover and the attacker within. In a very direct way, the breathing and meditation practices that are integral to martial arts training teach the artist to regulate the nervous system in the face of chaos, conflict, fear, and loathing, and support him or her in remaining centered and grounded. This is the most valuable training that martial arts give us, as our tendency is to either run away from challenge and conflict; react to them with hostility; or, if neither is possible, get deflated and collapse. Peace is not gained by running away from conflict or reacting with hostility. It is gained by facing conflict and making moves that will change the hearts of all who are involved. We share the following fictionalized story, based on the teaching experience of one of us, to illustrate how a teacher as martial artist would handle a conflict-charged pedagogical situation:

> *A student in my class is very dominating when he speaks. His mind seems to flit from one thought to another with barely a pause for breath. His words are punctuated by giggles and laughter that do not seem to fit with the content of what he is saying. I notice as well that the other students in the class seem preoccupied when he is speaking, and that this begins for most students at any moment when he begins to speak. I notice my own impatience and, at times, my unexpressed fury. Several weeks into the course this student starts up yet again. I notice all my reactions that I have seen previously, including my fury. This time I focus on my inner experience and I begin to feel my own sense of helplessness. This time, I do not fight it, and do not suppress it. I allow myself to feel my feelings. I feel*

a bodily sense of weakness as if this situation is beyond me. I have quick memory flashes of other times in my life where I had such feelings. Aha! My old patterns of experience were being reactivated. With this recognition and acknowledgment, I begin to feel a sense of relaxation, inner peace, and compassion for this student, for the other students, and for myself. A few seconds later, I speak in a calm and composed voice while this student is in the middle of a sentence. "You need to stop talking. You are off topic. You are not leaving any space for others." Suddenly everyone is alert and very attentive. This student protests, "I have not finished." I push the issue gently but firmly, and with full compassion in my voice. "You need to be quiet now and let others speak." The student goes silent. There is a visible sigh of relief from others. The situation with this student will need more work. The initial "blow" for change for him, for the others, and for me as educator has been struck.

Acknowledging, preparing for, and entering into internal and interpersonal conflict in the ways exemplified in the story are vital to transforming difficult situations. One cannot transform conflict if one does not notice, prepare for, or engage in the process. The martial arts explicitly put practitioners in the heat of conflict where the potential for injury and death are present. Although training conditions such as the use of protective equipment or rules of engagement are usually set to protect participants, awareness of our mortality and vulnerability "gives direction to our [martial art] training and provides the orientation that encourages us to advance toward a certain kind of perfection" (Tokitsu, 2012, p. 42). Contemporary martial arts master and sociologist Kenji Tokitsu (2012) speaks of this perfection in two different paradigms: one "pursued by an athlete or a practitioner of a sport" (p. 42), the other by martial artists. For us, in the present context, this difference is analogous to the difference between instruction and education, which we discussed at the beginning of this paper. The aim of martial arts—here expressed as the pursuit of perfection—is, ultimately, enlightenment: fulfillment of human potential in compassion and wisdom. Through serious and rigorous training, forged by the combative elements, the mind can become calm and steady across a range of conscious states and be sharpened like a sword to cut through delusions and distorted perceptions about ourselves and others. In applying this understanding of martial arts to education, the objective is not to cut down the annoying or threatening student upon whom our own fearful or infatuated distortions are projected!

The *Art* of Being Human

When associated with a particular practice such as the tea ceremony (*chado*) or calligraphy (*shodo*), understanding an art as a *do* or Way tells us that this activity has "surpassed its utilitarian purpose and has been raised to the level of art"

(Davey, 2007, p. 8). Martial arts as a Way are practiced not to defeat an opponent in battle but "to understand the ultimate nature of the whole of life by examining ourselves through a singular activity of life: to arrive at the universal through studying the particular" (Davey, 2007, p. 8)[3]. The universal concerns the dynamics of birth, death, growth, evolution, emergence, decay, and change, and the arts have the potential to teach us how to live, move, and dance with these dynamics.

Davey (2007) writes that understanding the *do* through one art gives the practitioner insight into the "principles, aesthetics, and mental states common to all the Ways" (p. 31). Any art form, when rooted in philosophies and practices for skillfully moving with and being moved by all of life's transition experiences, has tremendous potential for teaching us how to develop groundedness, mindfulness, integrity, compassion, cooperation, and creativity in the face of difficult circumstances. These qualities are important for educators who seek to address conflicts and challenges within themselves and with the students and peers they work with. Martial arts, if understood and practiced in the way we are addressing in this chapter, can illuminate certain aspects of mind-body connection, intuition, intention, presence, and attunement in interpersonal relationships, and reveal more about who the educator is and how they show up in the classroom.

The secret to a teacher's role and relationship with her students is that she is authentic and transparent with them, and that she manifests this way of being without giving up her authority or responsibility as teacher/leader/educator. She demonstrates her ability to set limits and be firm and decisive when necessary, which is very much in line with the martial arts view that we are professing: that the best fight is the one that does not take place. The ability to go elsewhere than a fight is based on relationship and on the ability to use a very finely tuned martial skill: namely, to anticipate what will happen before it happens and take action that will make the attack—or in a classroom, the disruption—unnecessary. Something else will be much more appealing and compelling. The resulting classroom culture may be counter to the cultures within which students have mostly lived. The teacher may be their first model, but the students can become culture carriers if the culture makes sense to them. At the least they will have a different experience in this class, and possibly they will carry some of this into their lives beyond the class. The ripple effect is possible, and we have seen it.

We draw on the Way of the true martial artist to say that the educator is prepared for what life presents at each and every moment. It will not help him or her to say, "This is not what I signed up for." The alternative in classroom environments that are populated with students in a constant state of fear and reactivity, always waiting for the next upheaval, threat, or frightening situation. Attempts to

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3   In the West, Aristotle made a similar distinction in examining knowledge that serves utilitarian purposes (*techne*) and knowledge that leads to development of one's humanity, which is reflected in the aims of liberal education (Levine, 1991, p. 8).

manage by coercing and removing students will be ongoing. Educators need to be equipped personally and professionally to respond to what is before them rather than constantly being in a state of reactivity and overwhelmed. We submit that the creation of environments counter to the mainstream culture is both possible and necessary, for the well-being of students and educators and for the overall cultural transformation that is so needed in school environments.

The implications for teacher education should be obvious to our readers. Teachers and pre-service teachers need education that speaks to the development of their wholeness, their ability to model that which they wish to have happen in classrooms, their facilitation skills, and a much increased knowledge of human beingness and how to work with it. Martial ways offer some of this knowledge; moreover, they offer fine-tuning as to how to be increasingly responsive to what is occurring in the moment.

We come to know ourselves more deeply through contemplative and artistic practices that refine the mind-body connection. With and through "art-as-Way," the possibility of living with authenticity in daily life becomes a reality. This authenticity arises from a lucid alignment between our actions and our feelings and beliefs. Davey (2007) reckons that cultivating mind-body unity through art—in our case, martial art—brings undiscovered talents and abilities to the surface, enabling us to bring the "force of our total being" (p. 90) to all of our actions. Imagine a teacher whose presence bears the force of his or her total being! Would such a teacher need to resort to external disciplinary actions and management techniques to control his or her students?

Cultivating Mind-Body Unity Through Martial Arts

The movement toward unity of mind and body is the essence of contemplative-artistic practices, such as the martial arts. What does such unity look and feel like? Yuasa (1987), Japanese philosopher and mind-body theorist, explains that in one's martial art training there comes a point where one experiences the entire body moving itself into spontaneous action without the direction of the intellect:

> [T]here is a state in which subject and object are not differentiated and the intellect and will are merged. It is a state in which the self and things are mutually responsive to each other; things do not move the self nor vice versa. There is only one world, one scene. (pp. 47-48)

When the self can penetrate the depths of the body, the body becomes a subject, and the mind "loses its opposition to objects; it gives up being ego-consciousness and experiences samadhi" (Yuasa, 1987, p. 72). The division between a conscious subject and an objective body to which one does something is dissolved. Yuasa's descriptions here are characteristic of what is known in the literature as "nondual" experience (Bai, 2002; Loy, 1997), in which the usual mind-body sepa-

ration is overcome and one experiences a profound unity of being. Knowing from this state of being is a different order of epistemology than knowing from ordinary dualistic consciousness (Walsh, 1992).

A person who has achieved mind-body unity has a qualitatively different presence from one who has not. This difference is most often noticed in terms of animating energy and vibration. In Asian cultures, this energy or animating vibration is referred to as *qi* (氣 in Chinese characters), *ki* (Korean and Japanese), or *prana* (Sanskrit), and it manifests through the particular presence of a person. Arts in Asian traditions, especially the martial arts, work with and cultivate this energetic presence. For instance, Chinese actors have a way of describing good actors as having "radiating presence" (*fa qi*), whereas poor actors would be considered to have "no presence" (*meiyou qi*) (Riley, as cited in Zarrilli, 2009, p. 19). In these traditions, our existential core, being a fluid center, points less to a psychologized self and more to something alive and animated.

The animated organic body is activated and invigorated by the energy of the breath. This connection to breath is directly reflected in the Chinese character for *qi* (氣), which has two parts: steam (气) rising from rice (米) as it is cooked. *Qi* is not simply the breath and the blowing of steam but also the alchemical process of cooking something difficult to digest into something that has refined nourishment and energy (Cohen & Bai, 2008). In other words, there is a vital connection between matter (such as human bodies) and vitality. It is this connection that the martial arts, along with other embodiment practices, foundationally cultivate: "By undergoing training in specific modes of embodied practice, this energy associated with breath and its accompanying force or power enlivens and quickens one's awareness, heightens one's sensory acuity and perception, and thereby animates and activates the entire bodymind" (Zarrilli, 2009, p. 19). Through focus on the felt experience of the body while engaging in a practice such as Aikido, *taijiquan*, *neigong*, the Indian martial art *kalarippayattu,* or yoga, the activated body-mind can then be the source of the educator's actions.

We believe that the ability of the educator to be aware in the moment, self-regulate, and attend with love and care to his embodied experience is the measure of his or her ability to model this behavior to students and develop warmth, connection, and trust in the context of the teacher-student relationship. An educator's ability to perceive and understand students more holistically through heightening the his or her own embodied awareness supports a capacity to become aware of others' non-verbal or non-discursive experience:

> [B]ecause we are not isolated subjectivities trapped within our bodies, but share an intersubjective milieu with others, we must also specify that a somatic mode of attention means not only attention to and with one's own body, but includes attention to the bodies of others. (Csordas, as cited in Hervey, 2007, p. 98)

As the educator develops high degrees of awareness of her own body systems and mind-body connections, she can have greater attunement with students and tap into the capacity to empathize and have compassion toward herself and others (Siegel, 2007). If we are using our martial arts training well, we realize that the likelihood that we will ever use the martial techniques is quite small, and that the real purpose of the training is the inner training that nurtures our capacity to development a fully-alive engagement with life, including life in our classrooms, in the best possible ways.

Building the Energetic Container

Containment is our capacity to be conscious of, and to hold and let go of emotional charge in the body, particularly in our musculature. Our muscles are "psychomotor resources" (Bernhardt, Bentzen, & Isaacs, 2004, p. 139) that we can engage to support novel activities and handle challenging situations. In the thick of experiences that arouse particular emotions such as anger, joy, or shame, some muscles are tense and tight (hyperresponsive) and other muscles can be weak or collapsed (hyporesponsive). With trained body awareness, we can learn to create a container in the body that supports us in *psychosocial integration*, which is our ability to be ourselves while in connection with others.

Brantjberg (2004) suggests that establishing containment involves developing at least three "tools": centering, or sensing the core; grounding, or sensing a connection to the ground; and discerning boundaries, or sensing a difference between self and world (p. 231). Centering involves active capacity to initiate movement from the lower abdominal region, which roughly corresponds to the area around our center of gravity. This area of center, referred to as *dantian* in Chinese and *hara* in Japanese, is considered to be a source of power, and the martial arts traditions lay heavy emphasis on training this area. The ability to move our entire being from the center, however, is not about a particular point in our body. Aikido master Richard Strozzi-Heckler (1997) notes: "If center is the place we operate from, then the entire living body is center" (p. 79). Our body has a spatial and temporal dimension and a connection to earth. To center, from this perspective, "is to experience our body in a total way" (Strozzi-Heckler, 1997, p. 79). *Center* in these terms is a way of describing what is our core self or individuality: our unique center in the universe. In psychological terms, it is key to healthy differentiation from others.

Grounding involves the sense of our weight upon the ground. One feels the weight of one's arms on the desk, one's bottom on the chair, and one's feet on the ground. For some people, Brantjberg (2004) notes, such an experience is difficult to connect with, because fear and anxiety arise from not trusting that we will actually be held by the ground; we lift ourselves away from the ground, can't stand still, or are reluctant to stand at all (p. 234). Grounding gives us the basic ability

to stay connected to our center under shifting circumstances. We can, through practices such as *neigong* and other martial or yogic arts, connect to the ground by surrendering the weight of our being to gravity. This does not mean collapsing but rather trusting that we can be supported by the ground.

Boundaries are about our sense of personal space—what is "me" and "not-me," or "us" and "them"—and emerge initially in the course of healthy development through the differentiation between the child and the mother. In the body we feel various sensations when our boundaries are respected or violated. For example, Brantbjerg (2004) observes that a strong "heartbeat, sweaty palms, held breath, an impulse to push with my arms, or similar sensations tell me that another person is too close to me at that moment, that my personal space is being pressured or invaded" (p. 238). Our ability to protect our center and claim our personal space is connected to the bodily impulses to say "no," to move toward what we want, and to move away from what we don't want. These impulses engage our whole being, particularly musculature and movement: we reach for what we want, push away what we don't want, and so on. Depending on our development, our muscles and tissues may be numbed, weakened, or hyperresponsive to these impulses, and some kind of embodiment training, be it the martial arts or body-based therapies, is vital to reestablishing a sense of healthy boundaries.

Why is building this energetic container important in education? In our re-visioning of education, we argued for a paradigm shift from a having-mode that prioritizes the accumulation of knowledge and skills to a being-mode that focuses on the cultivation of human *beings*. This shift represents a movement away from violating—however seductively—individuals' existential boundaries by means of forced ingestion of materials (content knowledge and skills) toward respectfully returning self-agency and self-regulation to individuals so that they can enact their freedom to choose, protect, and nurture themselves in keeping with their own sense of integrity and authenticity. This *way* fosters the cultivation of human beings who are existentially secure, calm, wise, generous, considerate, and compassionate. Such human beings can freely give and receive; negotiate boundaries and explore edges; and, in general, protect, support, nurture, and contribute to self and others. They know how to be unique individuals while simultaneously being members of a society.

In the following final section, we again offer a narrative to illustrate concretely the foregoing ideas about educator as martial artist.

Martial Arts Educator in Action

> *A man and a woman, both colleagues at a university, meet through a workshop and spark up a friendly connection through various activities and discussions. A friendship begins to develop over a number of*

months. They decide to meet up and discuss their shared research inter-ests. When they get together, it strikes the woman that she is sexually attracted to this man. His physical beauty and the exuberant vitality he has about life and creativity evokes some sort of desire inside of her. There is a sense of excitement that is also uncomfortable, and her mind immediately goes to worrying about what her husband would think of her having these feelings in response to this man. She breathes into the anx-ious discomfort, relaxes the muscles in her face, and feels the sense of ground beneath her. She is aware of a fear that her inner state is showing and has a desire to hide. She deepens her breathing into her abdomen as she switches back and forth between paying attention to him as he speaks and paying attention to her own wobbly inner world.

The meeting ends and she feels that the sexual energy has been dissi-pated, but she now has a contraction deep in her chest. Something inside feels threatened. She can feel her heart beating quickly and tensely, and she feels like a scared child that wants to hide. With the pain in her chest comes a sense of shame for having feelings of sexual attraction to anoth-er person. If she reveals them, she fears that respect will be withdrawn and she will be judged. Her first reaction is to downplay, ignore, and rationalize away the pain: "Of course people are attracted to others; it's human nature." The feeling of wanting to hide in shame, the contraction of her being, however, is very real, and she wants to turn toward it. It has lots of energy and it wants to move. She wants to heal the pain by finding a way of allowing it to move through her.

She tells her colleague she was at the transformative edge of her comfort zone today. She tells him that she had feelings of attraction and sexual energy in her body and feels shame. In the moment of telling him, the tension that was in the core of her upper body vibrates from the ends of her fingers, through her chest, up her neck, and out her lips. She no longer carries the psychic burden. Although naming her experience is a risk, she trusts that she is received empathically by her colleague. They are able to speak about embodied ways of working with attraction in professional relationships.

The woman in the story could have attempted to resolve the issue by ignoring her internal responses and pretending that they didn't happen or weren't difficult. She could have also decided to see her male colleague as the cause of her diffi-culty and resolved to avoid working with him so she wouldn't have another such experience. Perhaps she might have accused the man of making her uncomfortable and interpreted his invitation as flirtatious, which could have been the case. None

of these approaches, however, would have resolved her core issue, which would likely crop up again in some other circumstance. We can easily imagine other situations where we are working with students or colleagues that bring up emotions that are uncomfortable and disruptive. For example, some teachers are fearful of aggressive males and may try to have these students removed—sent to another class, counseling, or assessment, or some combination of these—to avoid having to work with them in order to not have to experience fear (Cohen, 2014).

Cohen (2014) points out that teachers are faced with a tremendous amount of external pressure with little support and that this should be taken into consideration in any discussion on how teachers cope with challenging emotions. He notes, however, that there is always a personal and inner dimension to our classroom experiences and that we can resolve many situations if we are able to resolve our own difficult experiences. This is our inner work, and in this paper we have given a place of special attention and study to martial arts as an inner work methodology. Through martial arts we can develop skills that engage our personal, interpersonal, transpersonal, and spiritual dimensions (Cohen, 2009, p. 30).

In the above vignette, the emotions of excitement, desire, shame, and fear were very real for this woman, and she could not ignore them despite the rationalization that it is normal to have desires for others. Doing inner work with these emotions reveals that:

- we carry learned emotional responses that reveal themselves in the thoughts and bodily sensations we have (e.g. shame, the need to hide, tension, and contraction in the chest);
- thoughts and rationalizations can normalize our experience yet still not offer a way of working with the internal distress;
- the emotional charge is a dynamic sensation and has the potential to move in some direction;
- a desire to heal the old pain and be in a new relationship with the pain motivates action and creates opportunities for becoming more whole; and
- being empathically received by another person we trust supports this process.

Body awareness and a capacity to contain emotional charge offer the potential to curiously observe and examine the phenomena, whereby we can either name these phenomena internally or express them externally. As well, we can reflect on them, and consciously choose how to relate to them (Brantbjerg, 2009). The capacity to stay in touch with the embodied, sensuous dimension is vital to the healing process. Susan Aposhyan (1999) says that we are at our healing edge "when we are feeling old pain and aware of a new possibility at the same time":

> Even if that movement is only a tight throb, there is always movement in any sensation. By breathing and allowing the sensation to

> move as it wants to, it eventually sequences out, bringing us into a
> new position in the world (p. 174).

By identifying only with our learned emotional responses, we keep inflicting pain upon ourselves. If we look only to ideas and fantasies about the future without honoring the energy in the body, we can disassociate from our experience. Hence, embodied contemplative practices, such as the various martial arts we have mentioned in this paper, teach us to work with breath, sensation, and movement to give a birth to a new self and a new world in each pregnant moment of our being.

With a *Gassho*

It is dojo etiquette to bow with folded hands raised to one's chest (this gesture is called *gassho*) before exiting. With a *gassho*, we would like to say to our readers: we appreciate your bearing with us through our lengthy paper and participating in the ideas that we have put forward here, ideas that we know to be radical by most standards. We realize that what we are pointing toward is a transformation in education and, more broadly, a transformation in culture and consciousness. We do not see one without the other. If only culture changes, then we are left with, at best, a better set of rules, but rules nonetheless. Such a change diminishes the human potential for agency and full aliveness. Similarly, individual consciousness change is most likely to lead to individualism and isolation. Education that focuses on the intersubjective life of all citizens within educational environments has great potential to influence meaningful change, cohesive community, and the fullness of life.

Acknowledgements

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